

THE CHARACTER TABLES OF CENTRALIZERS IN WEYL GROUPS OF E_8 I

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ABSTRACT. To classify the finite dimensional pointed Hopf algebras with Weyl group G of E_8 , we obtain the representatives of conjugacy classes of G and all character tables of centralizers of these representatives by means of software GAP. In this paper we only list character table 1– 28.

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keywords: GAP, Hopf algebra, Weyl group, character.

0. INTRODUCTION

This article is to contribute to the classification of finite-dimensional complex pointed Hopf algebras with Weyl groups of E_8 . Many papers are about the classification of finite dimensional pointed Hopf algebras, for example, [AS98, AS02, AS00, AS05, He06, AHS08, AG03, AFZ, AZ07, Gr00, Fa07, AF06, AF07, ZZC, ZC].

In these research ones need the centralizers and character tables of groups. In this paper we obtain the representatives of conjugacy classes of Weyl groups of E_8 and all character tables of centralizers of these representatives by means of software GAP. In this paper we only list character table 1– 28.

By the Cartan-Killing classification of simple Lie algebras over complex field the Weyl groups to be considered are $W(A_l), (l \geq 1)$; $W(B_l), (l \geq 2)$; $W(C_l), (l \geq 2)$; $W(D_l), (l \geq 4)$; $W(E_l), (8 \geq l \geq 6)$; $W(F_l), (l = 4)$; $W(G_l), (l = 2)$.

It is otherwise desirable to do this in view of the importance of Weyl groups in the theories of Lie groups, Lie algebras and algebraic groups. For example, the irreducible representations of Weyl groups were obtained by Frobenius, Schur and Young. The conjugacy classes of $W(F_4)$ were obtained by Wall [Wa63] and its character tables were obtained by Kondo [Ko65]. The conjugacy classes and character tables of $W(E_6)$, $W(E_7)$ and $W(E_8)$ were obtained by Frame [Fr51]. Carter gave a unified description of the conjugacy classes of Weyl groups of simple Lie algebras [Ca72].

1. PROGRAM

By using the following program in GAP, we obtain the representatives of conjugacy classes of Weyl groups of E_6 and all character tables of centralizers of these representatives.

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gap> L:=SimpleLieAlgebra("E",6,Rationals);;
gap> R:=RootSystem(L);;
gap> W:=WeylGroup(R);Display(Order(W));
gap > ccl:=ConjugacyClasses(W);;
gap> q:=NrConjugacyClasses(W);; Display (q);
gap> for i in [1..q] do
> r:=Order(Representative(ccl[i]));Display(r);;
> od; gap
> s1:=Representative(ccl[1]);cen1:=Centralizer(W,s1);;
gap> cl1:=ConjugacyClasses(cen1);
gap> s1:=Representative(ccl[2]);cen1:=Centralizer(W,s1);;
gap> cl2:=ConjugacyClasses(cen1);
gap> s1:=Representative(ccl[3]);cen1:=Centralizer(W,s1);;
gap> cl3:=ConjugacyClasses(cen1);
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gap> s1:=Representative(ccl[4]);cen1:=Centralizer(W,s1);
gap> cl4:=ConjugacyClasses(cen1);
gap> s1:=Representative(ccl[5]);cen1:=Centralizer(W,s1);
gap> cl5:=ConjugacyClasses(cen1);
gap> s1:=Representative(ccl[6]);cen1:=Centralizer(W,s1);
gap> cl6:=ConjugacyClasses(cen1);
gap> s1:=Representative(ccl[7]);cen1:=Centralizer(W,s1);
gap> cl7:=ConjugacyClasses(cen1);
gap> s1:=Representative(ccl[8]);cen1:=Centralizer(W,s1);
gap> cl8:=ConjugacyClasses(cen1);
gap> s1:=Representative(ccl[9]);cen1:=Centralizer(W,s1);
gap> cl9:=ConjugacyClasses(cen1);
gap> s1:=Representative(ccl[10]);cen1:=Centralizer(W,s1);
gap> cl10:=ConjugacyClasses(cen1);
gap> s1:=Representative(ccl[11]);cen1:=Centralizer(W,s1);
gap> cl11:=ConjugacyClasses(cen1);
gap> s1:=Representative(ccl[12]);cen1:=Centralizer(W,s1);
gap> cl2:=ConjugacyClasses(cen1);
gap> s1:=Representative(ccl[13]);cen1:=Centralizer(W,s1);
gap> cl13:=ConjugacyClasses(cen1);
gap> s1:=Representative(ccl[14]);cen1:=Centralizer(W,s1);
gap> cl14:=ConjugacyClasses(cen1);
gap> s1:=Representative(ccl[15]);cen1:=Centralizer(W,s1);
gap> cl15:=ConjugacyClasses(cen1);
gap> s1:=Representative(ccl[16]);cen1:=Centralizer(W,s1);
gap> cl16:=ConjugacyClasses(cen1);
gap> s1:=Representative(ccl[17]);cen1:=Centralizer(W,s1);
gap> cl17:=ConjugacyClasses(cen1);
gap> s1:=Representative(ccl[18]);cen1:=Centralizer(W,s1);
gap> cl18:=ConjugacyClasses(cen1);
gap> s1:=Representative(ccl[19]);cen1:=Centralizer(W,s1);
gap> cl19:=ConjugacyClasses(cen1);
gap> s1:=Representative(ccl[20]);cen1:=Centralizer(W,s1);
gap> cl20:=ConjugacyClasses(cen1);
gap> s1:=Representative(ccl[21]);cen1:=Centralizer(W,s1);
gap> cl21:=ConjugacyClasses(cen1);
gap> s1:=Representative(ccl[22]);cen1:=Centralizer(W,s1);
gap> cl22:=ConjugacyClasses(cen1);
gap> s1:=Representative(ccl[23]);cen1:=Centralizer(W,s1);
gap> cl23:=ConjugacyClasses(cen1);
gap> s1:=Representative(ccl[24]);cen1:=Centralizer(W,s1);
> cl24:=ConjugacyClasses(cen1);
gap> s1:=Representative(ccl[25]);cen1:=Centralizer(W,s1);
gap> cl25:=ConjugacyClasses(cen1);
gap> for i in [1..q] do
> s:=Representative(ccl[i]);cen:=Centralizer(W,s);
> char:=CharacterTable(cen);Display (cen);Display(char);

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$$\begin{aligned}
s_6 &:= \begin{pmatrix} 0 & 0 & 1 & 0 & -2 & 1 & 1 & 0 \\ -1 & 1 & 2 & 0 & -3 & 1 & 1 & 0 \\ -1 & 1 & 3 & -1 & -3 & 1 & 2 & 0 \\ -2 & 2 & 4 & -1 & -5 & 2 & 3 & -1 \\ -1 & 2 & 3 & -1 & -4 & 2 & 2 & -1 \\ -1 & 2 & 2 & -1 & -3 & 2 & 1 & 0 \\ 0 & 2 & 1 & -1 & -2 & 1 & 1 & 0 \\ 0 & 1 & 0 & 0 & -1 & 0 & 1 & 0 \end{pmatrix}, s_7 := \begin{pmatrix} -1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & -1 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & -1 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & -1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & -1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & -1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & -1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \\
s_8 &:= \begin{pmatrix} 1 & 1 & -1 & 0 & -1 & 1 & 1 & -1 \\ 0 & 1 & -1 & 0 & -1 & 2 & 1 & -2 \\ 1 & 1 & -1 & 0 & -2 & 3 & 1 & -2 \\ 1 & 1 & -2 & 1 & -3 & 4 & 2 & -4 \\ 1 & 0 & -2 & 1 & -2 & 3 & 2 & -3 \\ 1 & 0 & -2 & 1 & -2 & 3 & 1 & -2 \\ 0 & 0 & -1 & 1 & -2 & 2 & 1 & -1 \\ 0 & 0 & -1 & 1 & -1 & 1 & 0 & 0 \end{pmatrix}, s_9 := \begin{pmatrix} -1 & -2 & 0 & 2 & -1 & 0 & 1 & -1 \\ -1 & -3 & 1 & 2 & -2 & 1 & 1 & -1 \\ -1 & -4 & 0 & 4 & -3 & 1 & 1 & -1 \\ -2 & -5 & 1 & 5 & -5 & 2 & 2 & -2 \\ -1 & -4 & 0 & 4 & -4 & 2 & 2 & -2 \\ -1 & -3 & 0 & 3 & -3 & 1 & 2 & -1 \\ -1 & -2 & 0 & 2 & -2 & 1 & 1 & -1 \\ 0 & -1 & 0 & 1 & -1 & 0 & 1 & -1 \end{pmatrix}, \\
s_{10} &:= \begin{pmatrix} -1 & 1 & 0 & 1 & -2 & 1 & -1 & 1 \\ -1 & 1 & -1 & 2 & -2 & 0 & -1 & 2 \\ -2 & 2 & 0 & 2 & -3 & 0 & -1 & 2 \\ -3 & 2 & 0 & 3 & -4 & 0 & -2 & 4 \\ -3 & 2 & 0 & 2 & -3 & 0 & -1 & 3 \\ -2 & 2 & 0 & 1 & -2 & 0 & -1 & 2 \\ -1 & 2 & 0 & 0 & -1 & 0 & -1 & 2 \\ -1 & 1 & 0 & 0 & 0 & 0 & -1 & 1 \end{pmatrix}, s_{11} := \begin{pmatrix} -1 & -2 & 1 & 1 & -1 & 1 & 0 & 0 \\ -3 & -2 & 2 & 1 & -1 & 1 & 0 & 0 \\ -3 & -3 & 2 & 2 & -2 & 2 & -1 & 1 \\ -5 & -4 & 3 & 3 & -3 & 2 & 0 & 1 \\ -4 & -3 & 2 & 2 & -2 & 2 & 0 & 1 \\ -3 & -2 & 2 & 1 & -2 & 2 & 0 & 1 \\ -2 & -2 & 1 & 1 & -1 & 1 & 0 & 1 \\ -1 & -1 & 1 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \\
s_{12} &:= \begin{pmatrix} 1 & 0 & -1 & 1 & 0 & -1 & 1 & -1 \\ 1 & 0 & -1 & 1 & 0 & -1 & 1 & 0 \\ 1 & -1 & -1 & 2 & 0 & -2 & 2 & -1 \\ 1 & -1 & -2 & 3 & 0 & -2 & 2 & -1 \\ 1 & -1 & -2 & 2 & 1 & -2 & 2 & -1 \\ 1 & -1 & -2 & 2 & 0 & -1 & 2 & -1 \\ 0 & 0 & -1 & 1 & 0 & -1 & 2 & -1 \\ 0 & 0 & -1 & 1 & 0 & -1 & 1 & 0 \end{pmatrix}, s_{13} := \begin{pmatrix} 0 & 0 & 2 & -1 & 0 & -1 & 0 & 1 \\ 0 & 1 & 3 & -2 & 0 & -1 & 0 & 0 \\ 0 & 0 & 4 & -2 & 0 & -1 & -1 & 1 \\ 1 & 1 & 5 & -3 & 0 & -2 & -1 & 1 \\ 1 & 1 & 4 & -3 & 0 & -1 & -1 & 1 \\ 1 & 1 & 3 & -3 & 1 & -1 & -1 & 1 \\ 1 & 0 & 2 & -2 & 1 & -1 & 0 & 0 \\ 1 & 0 & 1 & -1 & 0 & 0 & 0 & 0 \end{pmatrix}, \\
s_{14} &:= \begin{pmatrix} 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 1 & 1 & 0 & 0 & -1 & 1 & 0 & -1 \\ 1 & 0 & 1 & 0 & -1 & 1 & 0 & -1 \\ 2 & 0 & 0 & 1 & -2 & 2 & 0 & -2 \\ 2 & 0 & 0 & 0 & -1 & 2 & 0 & -2 \\ 1 & 0 & 0 & 0 & -1 & 2 & 0 & -1 \\ 1 & 0 & 0 & 0 & -1 & 1 & 1 & -1 \\ 1 & 0 & 0 & 0 & -1 & 1 & 0 & 0 \end{pmatrix}, s_{15} := \begin{pmatrix} 0 & 1 & 0 & 0 & 0 & 0 & 0 & -1 \\ 1 & 1 & -1 & 1 & -1 & 0 & 1 & -2 \\ 0 & 1 & 0 & 1 & -1 & 0 & 1 & -3 \\ 1 & 1 & -1 & 2 & -2 & 1 & 1 & -4 \\ 1 & 1 & -1 & 1 & -1 & 1 & 1 & -4 \\ 0 & 1 & -1 & 1 & -1 & 1 & 1 & -3 \\ 0 & 1 & 0 & 0 & -1 & 1 & 1 & -2 \\ 0 & 1 & 0 & 0 & -1 & 1 & 0 & -1 \end{pmatrix},
\end{aligned}$$

$$\begin{aligned}
s_{16} &:= \begin{pmatrix} -1 & 1 & 1 & -1 & -1 & 1 & 1 & 0 \\ -1 & 2 & 1 & -1 & -2 & 1 & 2 & -1 \\ -2 & 2 & 2 & -2 & -2 & 2 & 2 & -1 \\ -2 & 3 & 2 & -2 & -4 & 3 & 3 & -1 \\ -2 & 2 & 2 & -1 & -4 & 3 & 2 & -1 \\ -2 & 2 & 2 & -1 & -3 & 2 & 1 & 0 \\ -1 & 1 & 2 & -1 & -2 & 1 & 1 & 0 \\ 0 & 1 & 1 & -1 & -1 & 1 & 0 & 0 \end{pmatrix}, s_{17} := \begin{pmatrix} 0 & 0 & 0 & -1 & 2 & -1 & 1 & -2 \\ 1 & -1 & 0 & -1 & 2 & -1 & 2 & -3 \\ 1 & -1 & -1 & -1 & 3 & -1 & 2 & -4 \\ 2 & -1 & -1 & -2 & 4 & -1 & 3 & -6 \\ 2 & -1 & -1 & -1 & 3 & -1 & 2 & -5 \\ 1 & -1 & -1 & 0 & 2 & -1 & 2 & -4 \\ 0 & -1 & 0 & 0 & 1 & 0 & 1 & -3 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & -2 \end{pmatrix}, \\
s_{18} &:= \begin{pmatrix} 0 & -1 & 0 & 0 & 0 & 0 & 0 & 1 \\ 0 & -1 & 1 & -1 & 0 & 1 & -1 & 1 \\ 1 & -1 & 0 & -1 & 0 & 1 & -1 & 2 \\ 1 & -1 & 1 & -2 & 0 & 1 & -1 & 2 \\ 1 & -1 & 1 & -1 & -1 & 1 & -1 & 2 \\ 1 & -1 & 1 & -1 & 0 & 0 & -1 & 2 \\ 1 & -1 & 0 & 0 & 0 & 0 & -1 & 1 \\ 1 & -1 & 0 & 0 & 0 & 0 & 0 & 0 \end{pmatrix}, s_{19} := \begin{pmatrix} 0 & 0 & 1 & -1 & 1 & 0 & 0 & -2 \\ -1 & 0 & 2 & -2 & 2 & 0 & 0 & -2 \\ -1 & 0 & 2 & -2 & 2 & 1 & -1 & -3 \\ -1 & 0 & 3 & -3 & 3 & 1 & -1 & -4 \\ -1 & 0 & 2 & -2 & 3 & 0 & -1 & -3 \\ -1 & 0 & 1 & -1 & 2 & 0 & 0 & -3 \\ -1 & -1 & 1 & 0 & 1 & 0 & 0 & -2 \\ -1 & 0 & 1 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \\
s_{20} &:= \begin{pmatrix} 1 & 0 & -1 & -1 & 2 & 0 & -1 & 0 \\ 0 & 0 & -1 & -1 & 3 & 0 & -2 & 0 \\ 1 & 1 & -2 & -2 & 4 & 0 & -2 & 0 \\ 1 & 1 & -2 & -3 & 6 & 0 & -3 & -1 \\ 1 & 1 & -1 & -3 & 5 & 0 & -3 & 0 \\ 1 & 0 & -1 & -2 & 4 & 0 & -2 & 0 \\ 1 & 0 & -1 & -1 & 2 & 1 & -2 & 0 \\ 0 & 0 & 0 & -1 & 1 & 1 & -1 & 0 \end{pmatrix}, s_{21} := \begin{pmatrix} 1 & 1 & -1 & -1 & 1 & 0 & 1 & -1 \\ 0 & 2 & -1 & -1 & 1 & 0 & 1 & -1 \\ 0 & 2 & -1 & -2 & 2 & 0 & 2 & -2 \\ 0 & 3 & -2 & -2 & 2 & 1 & 2 & -3 \\ 0 & 2 & -1 & -2 & 2 & 1 & 1 & -2 \\ 0 & 1 & -1 & -1 & 1 & 1 & 1 & -1 \\ 0 & 1 & 0 & -1 & 0 & 1 & 1 & -1 \\ 0 & 1 & 0 & -1 & 0 & 1 & 0 & 0 \end{pmatrix}, \\
s_{22} &:= \begin{pmatrix} -1 & 0 & 1 & 0 & -1 & 1 & -1 & 0 \\ -2 & 0 & 2 & -1 & 0 & 1 & -2 & 1 \\ -2 & 1 & 2 & -1 & -1 & 2 & -3 & 1 \\ -3 & 1 & 4 & -2 & -1 & 2 & -4 & 2 \\ -3 & 1 & 3 & -1 & -1 & 1 & -3 & 2 \\ -2 & 1 & 2 & -1 & 0 & 0 & -2 & 1 \\ -1 & 0 & 1 & 0 & 0 & 0 & -2 & 1 \\ -1 & 0 & 1 & 0 & 0 & 0 & -1 & 0 \end{pmatrix}, s_{23} := \begin{pmatrix} 0 & 0 & -1 & 1 & -1 & 2 & -1 & -1 \\ 1 & -1 & -2 & 2 & -2 & 3 & -1 & -1 \\ 1 & 0 & -2 & 2 & -3 & 4 & -1 & -2 \\ 1 & -1 & -3 & 3 & -4 & 6 & -1 & -3 \\ 1 & -1 & -3 & 3 & -3 & 4 & 0 & -3 \\ 0 & -1 & -2 & 3 & -3 & 3 & 0 & -2 \\ 0 & 0 & -2 & 2 & -2 & 2 & 0 & -1 \\ 0 & 0 & -1 & 1 & -1 & 1 & 0 & -1 \end{pmatrix}, \\
s_{24} &:= \begin{pmatrix} -1 & 0 & 1 & 0 & -1 & 1 & -1 & 0 \\ 0 & -1 & 1 & 0 & -1 & 1 & -1 & 0 \\ 0 & 0 & 1 & 0 & -2 & 2 & -2 & 0 \\ 0 & 0 & 2 & -1 & -2 & 2 & -2 & 0 \\ 0 & 0 & 1 & 0 & -2 & 1 & -1 & 0 \\ 0 & 0 & 1 & 0 & -1 & 0 & -1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & -1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, s_{25} := \begin{pmatrix} 1 & -1 & 1 & -1 & 1 & 0 & 0 & -1 \\ 1 & -1 & 1 & -1 & 1 & 0 & 1 & -3 \\ 2 & -2 & 1 & -1 & 1 & 1 & 0 & -3 \\ 3 & -2 & 1 & -2 & 2 & 1 & 1 & -5 \\ 3 & -2 & 0 & -1 & 2 & 0 & 1 & -4 \\ 2 & -2 & 0 & 0 & 1 & 0 & 1 & -3 \\ 1 & -2 & 0 & 0 & 1 & 0 & 1 & -2 \\ 1 & -1 & 0 & 0 & 0 & 0 & 1 & -1 \end{pmatrix},
\end{aligned}$$

$$\begin{aligned}
s_{26} &:= \begin{pmatrix} 0 & -1 & 1 & 0 & -1 & 1 & -1 & 1 \\ 0 & -1 & 1 & 0 & -1 & 1 & -1 & 0 \\ 1 & -1 & 1 & 0 & -2 & 2 & -2 & 1 \\ 1 & -1 & 2 & -1 & -2 & 2 & -2 & 1 \\ 1 & -1 & 1 & 0 & -2 & 1 & -1 & 1 \\ 1 & -1 & 1 & 0 & -1 & 0 & -1 & 1 \\ 1 & -1 & 0 & 0 & 0 & 0 & -1 & 1 \\ 1 & -1 & 0 & 0 & 0 & 0 & 0 & 0 \end{pmatrix}, s_{27} := \begin{pmatrix} 0 & 1 & 2 & -2 & 0 & 0 & 0 & 0 \\ 0 & 1 & 3 & -3 & 1 & -1 & 0 & 1 \\ 0 & 1 & 4 & -4 & 1 & 0 & -1 & 1 \\ 1 & 2 & 5 & -6 & 2 & -1 & -1 & 2 \\ 1 & 1 & 4 & -4 & 1 & -1 & -1 & 2 \\ 1 & 1 & 3 & -3 & 1 & -1 & -1 & 1 \\ 1 & 0 & 2 & -2 & 1 & -1 & 0 & 0 \\ 1 & 0 & 1 & -1 & 0 & 0 & 0 & 0 \end{pmatrix}, \\
s_{28} &:= \begin{pmatrix} 1 & 1 & 0 & -1 & 0 & 1 & 0 & -1 \\ 1 & 1 & 0 & -1 & 0 & 1 & 0 & 0 \\ 1 & 1 & 1 & -2 & 0 & 2 & 0 & -1 \\ 2 & 1 & 0 & -2 & 0 & 3 & 0 & -1 \\ 2 & 0 & 0 & -1 & 0 & 2 & 0 & -1 \\ 1 & 0 & 0 & 0 & -1 & 2 & 0 & -1 \\ 1 & 0 & 0 & 0 & -1 & 1 & 1 & -1 \\ 1 & 0 & 0 & 0 & -1 & 1 & 0 & 0 \end{pmatrix}, s_{29} := \begin{pmatrix} 0 & 0 & -1 & 0 & 1 & 0 & 1 & -2 \\ 1 & -1 & -1 & 0 & 1 & 0 & 2 & -3 \\ 0 & -1 & -1 & 0 & 1 & 1 & 2 & -4 \\ 1 & -1 & -2 & 0 & 1 & 1 & 4 & -6 \\ 1 & -1 & -2 & 1 & 0 & 1 & 3 & -5 \\ 0 & -1 & -1 & 1 & 0 & 0 & 3 & -4 \\ 0 & 0 & 0 & 0 & 0 & 0 & 2 & -3 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & -2 \end{pmatrix}, \\
s_{30} &:= \begin{pmatrix} 0 & 1 & 1 & -1 & -1 & 2 & -1 & 0 \\ 0 & 1 & 1 & -1 & -1 & 2 & -1 & 1 \\ 0 & 1 & 1 & -1 & -2 & 4 & -2 & 1 \\ 1 & 2 & 1 & -2 & -2 & 5 & -3 & 2 \\ 1 & 1 & 1 & -1 & -2 & 4 & -3 & 2 \\ 1 & 1 & 0 & 0 & -2 & 3 & -2 & 1 \\ 1 & 0 & 0 & 0 & -1 & 2 & -1 & 0 \\ 1 & 0 & 0 & 0 & -1 & 1 & 0 & 0 \end{pmatrix}, s_{31} := \begin{pmatrix} 1 & 1 & -1 & 1 & -2 & 1 & 0 & 0 \\ 1 & 1 & -1 & 1 & -2 & 2 & -1 & 0 \\ 1 & 2 & -2 & 2 & -3 & 2 & -1 & 0 \\ 2 & 2 & -3 & 3 & -4 & 3 & -2 & 1 \\ 2 & 2 & -3 & 2 & -3 & 3 & -2 & 1 \\ 1 & 2 & -2 & 1 & -2 & 2 & -1 & 1 \\ 0 & 1 & -1 & 1 & -2 & 2 & -1 & 1 \\ 0 & 1 & 0 & 0 & -1 & 1 & -1 & 1 \end{pmatrix}, \\
s_{32} &:= \begin{pmatrix} 0 & 0 & 1 & 0 & -1 & 0 & 1 & 0 \\ 1 & 1 & 0 & 0 & -1 & 0 & 1 & 0 \\ 1 & 0 & 1 & 0 & -1 & 0 & 1 & 0 \\ 2 & 1 & 1 & 0 & -2 & 0 & 1 & 1 \\ 2 & 1 & 1 & -1 & -1 & 0 & 1 & 1 \\ 1 & 1 & 1 & -1 & -1 & 1 & 0 & 1 \\ 0 & 1 & 1 & -1 & 0 & 0 & 0 & 1 \\ 0 & 1 & 1 & -1 & 0 & 0 & 0 & 0 \end{pmatrix}, s_{33} := \begin{pmatrix} 0 & 0 & -1 & 1 & 0 & -1 & 0 & 0 \\ -1 & -1 & 0 & 1 & 0 & -1 & 0 & 0 \\ -1 & -1 & -1 & 2 & 0 & -2 & 0 & 1 \\ -1 & -2 & -1 & 3 & -1 & -2 & 0 & 1 \\ -1 & -1 & -1 & 2 & -1 & -1 & 0 & 1 \\ 0 & -1 & -1 & 1 & 0 & -1 & 0 & 1 \\ 0 & -1 & -1 & 1 & 0 & 0 & -1 & 1 \\ 0 & -1 & -1 & 1 & 0 & 0 & 0 & 0 \end{pmatrix}, \\
s_{34} &:= \begin{pmatrix} 0 & 0 & 1 & 0 & -1 & 1 & 0 & -1 \\ 0 & 0 & 1 & 0 & -1 & 1 & 0 & 0 \\ 0 & -1 & 1 & 1 & -2 & 2 & 0 & -1 \\ 1 & -1 & 1 & 1 & -2 & 2 & 0 & -1 \\ 1 & -1 & 1 & 0 & -1 & 2 & 0 & -1 \\ 1 & 0 & 0 & 0 & -1 & 2 & 0 & -1 \\ 1 & 0 & 0 & 0 & -1 & 1 & 1 & -1 \\ 1 & 0 & 0 & 0 & -1 & 1 & 0 & 0 \end{pmatrix}, s_{35} := \begin{pmatrix} -1 & 0 & 0 & 1 & -1 & 1 & 0 & -1 \\ 0 & 0 & 0 & 1 & -2 & 2 & 0 & -1 \\ 0 & 0 & -1 & 2 & -2 & 2 & 0 & -2 \\ 0 & 0 & 0 & 2 & -3 & 3 & 0 & -3 \\ 0 & 0 & 0 & 1 & -2 & 3 & 0 & -3 \\ 0 & 1 & 0 & 0 & -1 & 2 & 0 & -2 \\ 0 & 1 & 0 & 0 & -1 & 1 & 1 & -2 \\ 0 & 1 & 0 & 0 & -1 & 1 & 0 & -1 \end{pmatrix},
\end{aligned}$$

$$\begin{aligned}
s_{36} &:= \begin{pmatrix} 0 & 0 & 0 & 0 & -1 & 2 & 0 & -1 \\ 0 & 1 & 1 & -1 & -1 & 2 & 0 & -1 \\ -1 & 1 & 1 & -1 & -1 & 3 & 0 & -2 \\ -1 & 1 & 2 & -2 & -1 & 4 & 0 & -2 \\ -1 & 0 & 2 & -1 & -1 & 3 & 0 & -2 \\ -1 & 0 & 1 & 0 & -1 & 2 & 0 & -1 \\ -1 & 0 & 1 & 0 & -1 & 1 & 1 & -1 \\ -1 & 0 & 1 & 0 & -1 & 1 & 0 & 0 \end{pmatrix}, s_{37} := \begin{pmatrix} 1 & 1 & 1 & -2 & 1 & 0 & 0 & -1 \\ 3 & 1 & 0 & -2 & 1 & 0 & 0 & -1 \\ 3 & 1 & 1 & -3 & 1 & 1 & 0 & -2 \\ 5 & 2 & 1 & -4 & 1 & 1 & 0 & -2 \\ 4 & 1 & 1 & -3 & 1 & 0 & 1 & -2 \\ 3 & 1 & 1 & -3 & 1 & 0 & 1 & -1 \\ 2 & 0 & 1 & -2 & 1 & 0 & 0 & 0 \\ 1 & 0 & 1 & -1 & 0 & 0 & 0 & 0 \end{pmatrix}, \\
s_{38} &:= \begin{pmatrix} 0 & 0 & 0 & -1 & 2 & -1 & 1 & -2 \\ -1 & 1 & 1 & -2 & 3 & -2 & 1 & -2 \\ -1 & 1 & 1 & -3 & 4 & -2 & 2 & -3 \\ -1 & 2 & 2 & -5 & 6 & -3 & 2 & -4 \\ -1 & 1 & 2 & -4 & 5 & -2 & 1 & -3 \\ -1 & 0 & 2 & -3 & 4 & -2 & 1 & -2 \\ -1 & 0 & 2 & -2 & 2 & -1 & 1 & -2 \\ -1 & 0 & 1 & -1 & 1 & 0 & 0 & -1 \end{pmatrix}, s_{39} := \begin{pmatrix} 0 & 0 & -1 & 2 & -1 & 0 & -1 & 0 \\ 1 & -1 & -2 & 3 & -1 & 0 & -1 & -1 \\ 1 & -1 & -2 & 4 & -2 & 0 & -2 & 0 \\ 1 & -2 & -3 & 6 & -2 & -1 & -2 & -1 \\ 1 & -1 & -3 & 5 & -2 & -1 & -1 & -1 \\ 0 & -1 & -2 & 4 & -2 & 0 & -1 & -1 \\ 0 & -1 & -2 & 3 & -1 & 0 & -1 & 0 \\ 0 & -1 & -1 & 2 & -1 & 0 & 0 & 0 \end{pmatrix}, \\
s_{40} &:= \begin{pmatrix} 0 & -1 & -1 & 2 & 0 & -1 & 0 & -1 \\ -1 & -2 & 0 & 3 & -1 & -1 & 0 & -1 \\ -1 & -2 & 0 & 3 & 0 & -2 & 0 & -2 \\ -1 & -4 & 0 & 5 & -1 & -2 & 0 & -3 \\ -1 & -3 & 0 & 4 & -1 & -1 & -1 & -2 \\ 0 & -2 & 0 & 3 & -1 & -1 & -1 & -1 \\ 0 & -1 & 0 & 2 & -1 & 0 & -1 & -1 \\ 0 & 0 & 0 & 1 & -1 & 0 & 0 & -1 \end{pmatrix}, s_{41} := \begin{pmatrix} 0 & -2 & 0 & 0 & 1 & 0 & 1 & -1 \\ 0 & -2 & 1 & -1 & 2 & -1 & 2 & -2 \\ -1 & -3 & 1 & -1 & 3 & -1 & 2 & -2 \\ 0 & -4 & 1 & -2 & 5 & -2 & 3 & -3 \\ 0 & -3 & 1 & -2 & 4 & -2 & 3 & -2 \\ 0 & -2 & 0 & -1 & 3 & -2 & 3 & -2 \\ 0 & -2 & 0 & 0 & 2 & -2 & 2 & -1 \\ 0 & -1 & 0 & 0 & 1 & -1 & 1 & 0 \end{pmatrix}, \\
s_{42} &:= \begin{pmatrix} 0 & 0 & -1 & 0 & 1 & -1 & 0 & 1 \\ -1 & -1 & 0 & 0 & 1 & -1 & 0 & 1 \\ -1 & 0 & 0 & -1 & 2 & -2 & 0 & 2 \\ -1 & -1 & 0 & -1 & 2 & -2 & 0 & 3 \\ -1 & -1 & 0 & 0 & 1 & -2 & 0 & 3 \\ 0 & -1 & 0 & 0 & 1 & -2 & 0 & 2 \\ 0 & -1 & 0 & 0 & 1 & -1 & -1 & 2 \\ 0 & -1 & 0 & 0 & 1 & -1 & 0 & 1 \end{pmatrix}, s_{43} := \begin{pmatrix} 1 & 1 & -1 & 0 & 0 & 1 & -2 & 0 \\ 2 & 1 & -3 & 1 & 0 & 1 & -2 & 0 \\ 2 & 2 & -3 & 1 & 0 & 1 & -3 & 0 \\ 3 & 2 & -5 & 2 & 0 & 2 & -5 & 1 \\ 2 & 2 & -4 & 1 & 1 & 1 & -4 & 1 \\ 1 & 2 & -3 & 1 & 0 & 1 & -3 & 1 \\ 1 & 2 & -2 & 0 & 0 & 1 & -2 & 1 \\ 0 & 1 & -1 & 0 & 0 & 1 & -1 & 0 \end{pmatrix}, \\
s_{44} &:= \begin{pmatrix} 0 & -2 & 0 & 1 & 0 & 0 & 0 & -1 \\ 0 & -3 & 0 & 1 & 0 & 1 & -1 & 0 \\ 1 & -4 & -1 & 2 & 0 & 1 & -1 & -1 \\ 0 & -6 & -1 & 3 & 0 & 2 & -2 & -1 \\ 0 & -5 & -1 & 2 & 1 & 1 & -1 & -1 \\ 0 & -4 & -1 & 2 & 0 & 1 & 0 & -1 \\ 0 & -2 & -1 & 1 & 0 & 1 & 0 & -1 \\ 0 & -1 & -1 & 1 & 0 & 0 & 0 & 0 \end{pmatrix}, s_{45} := \begin{pmatrix} -2 & 0 & 1 & 0 & 1 & -2 & 1 & 0 \\ -2 & -1 & 2 & 0 & 1 & -3 & 2 & 0 \\ -3 & -1 & 2 & 0 & 2 & -4 & 2 & 0 \\ -4 & -1 & 4 & -1 & 3 & -6 & 3 & 0 \\ -3 & 0 & 3 & -1 & 2 & -5 & 3 & 0 \\ -2 & 0 & 2 & 0 & 1 & -4 & 2 & 0 \\ -2 & 0 & 2 & 0 & 0 & -2 & 1 & 0 \\ -1 & 0 & 1 & 0 & 0 & -1 & 1 & -1 \end{pmatrix},
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s_{46} &:= \begin{pmatrix} -1 & 2 & 1 & -1 & -1 & 0 & 1 & 0 \\ 0 & 2 & 1 & -1 & -2 & 0 & 2 & 0 \\ -1 & 3 & 2 & -1 & -3 & 0 & 2 & 0 \\ -1 & 4 & 2 & -1 & -4 & -1 & 4 & 0 \\ -1 & 3 & 2 & -1 & -3 & -1 & 3 & 0 \\ 0 & 3 & 1 & -1 & -2 & -1 & 2 & 0 \\ 0 & 2 & 0 & 0 & -2 & 0 & 1 & 0 \\ 0 & 1 & 0 & 0 & -1 & 0 & 0 & 1 \end{pmatrix}, s_{47} := \begin{pmatrix} -2 & -1 & 1 & 0 & 1 & -1 & 1 & 0 \\ -2 & -2 & 2 & 0 & 1 & -2 & 2 & 0 \\ -3 & -3 & 2 & 0 & 2 & -2 & 2 & 0 \\ -4 & -4 & 4 & -1 & 3 & -3 & 3 & 0 \\ -3 & -3 & 3 & -1 & 2 & -2 & 3 & 0 \\ -2 & -3 & 2 & 0 & 1 & -1 & 2 & 0 \\ -2 & -2 & 2 & 0 & 0 & 0 & 1 & 0 \\ -1 & -1 & 1 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \\
s_{48} &:= \begin{pmatrix} 0 & 1 & -1 & 1 & -1 & 1 & -1 & 0 \\ -1 & 1 & 0 & 1 & -2 & 2 & -1 & 0 \\ -1 & 2 & -1 & 2 & -3 & 2 & -1 & 0 \\ -2 & 3 & 0 & 2 & -4 & 3 & -2 & 0 \\ -2 & 3 & 0 & 1 & -3 & 3 & -2 & 0 \\ -1 & 3 & 0 & 0 & -2 & 2 & -1 & 0 \\ 0 & 2 & 0 & 0 & -2 & 2 & -1 & 0 \\ 0 & 1 & 0 & 0 & -1 & 1 & 0 & -1 \end{pmatrix}, s_{49} := \begin{pmatrix} -1 & -1 & 0 & 1 & 0 & 0 & -1 & 0 \\ 0 & -1 & 0 & 1 & 0 & 0 & -2 & 0 \\ -1 & -1 & 0 & 1 & 1 & -1 & -2 & 0 \\ -1 & -2 & 1 & 1 & 1 & -1 & -3 & 0 \\ -1 & -1 & 1 & 0 & 1 & 0 & -3 & 0 \\ -1 & -1 & 1 & 0 & 1 & 0 & -3 & 1 \\ -1 & -1 & 1 & 0 & 1 & 0 & -2 & 0 \\ -1 & 0 & 1 & 0 & 0 & 0 & -1 & 0 \end{pmatrix}, \\
s_{50} &:= \begin{pmatrix} 0 & -1 & 1 & 0 & 0 & 1 & -2 & 0 \\ 0 & -2 & 0 & 1 & 0 & 2 & -3 & 0 \\ 1 & -2 & 0 & 1 & 0 & 2 & -4 & 0 \\ 0 & -3 & 0 & 2 & 0 & 3 & -6 & 0 \\ 0 & -3 & 0 & 2 & 0 & 2 & -4 & -1 \\ 0 & -2 & 0 & 1 & 1 & 1 & -3 & -1 \\ 0 & -1 & 0 & 1 & 0 & 1 & -2 & -1 \\ 0 & 0 & 0 & 0 & 0 & 1 & -1 & -1 \end{pmatrix}, s_{51} := \begin{pmatrix} 0 & 1 & -1 & 1 & -1 & 0 & 0 & 1 \\ 0 & 1 & 0 & 1 & -2 & 0 & 0 & 2 \\ -1 & 2 & 0 & 1 & -2 & 0 & 0 & 2 \\ 0 & 3 & 0 & 1 & -3 & 0 & 0 & 3 \\ 0 & 3 & 0 & 0 & -2 & 0 & 0 & 3 \\ 0 & 3 & 0 & 0 & -2 & 0 & 0 & 2 \\ 0 & 2 & 0 & 0 & -1 & -1 & 1 & 1 \\ 0 & 1 & 0 & 0 & 0 & -1 & 0 & 1 \end{pmatrix}, \\
s_{52} &:= \begin{pmatrix} -1 & -2 & 0 & 1 & 1 & -1 & 1 & -1 \\ -1 & -3 & 1 & 0 & 2 & -1 & 1 & -1 \\ -1 & -4 & 0 & 1 & 2 & -1 & 2 & -2 \\ -1 & -6 & 1 & 1 & 3 & -2 & 3 & -3 \\ -1 & -5 & 1 & 1 & 2 & -1 & 2 & -3 \\ -1 & -3 & 1 & 0 & 2 & -1 & 2 & -3 \\ -1 & -2 & 1 & 0 & 1 & 0 & 1 & -2 \\ -1 & -1 & 1 & 0 & 0 & 0 & 1 & -1 \end{pmatrix}, s_{53} := \begin{pmatrix} 0 & 0 & -1 & 1 & 1 & -2 & 1 & -1 \\ 1 & 1 & -1 & 0 & 2 & -3 & 1 & -1 \\ 1 & 0 & -2 & 1 & 3 & -4 & 1 & -1 \\ 2 & 0 & -2 & 1 & 4 & -6 & 2 & -2 \\ 1 & 0 & -1 & 1 & 3 & -5 & 1 & -1 \\ 1 & 0 & -1 & 1 & 2 & -4 & 1 & -1 \\ 1 & 0 & -1 & 1 & 1 & -2 & 0 & -1 \\ 0 & 0 & 0 & 0 & 1 & -1 & 0 & -1 \end{pmatrix}, \\
s_{54} &:= \begin{pmatrix} 0 & 0 & -1 & 0 & 1 & 0 & -1 & 2 \\ -1 & 0 & -1 & 1 & 0 & 0 & -1 & 3 \\ -1 & 0 & -2 & 1 & 1 & 0 & -1 & 3 \\ -2 & 1 & -2 & 1 & 1 & 0 & -2 & 5 \\ -2 & 1 & -1 & 0 & 1 & 0 & -1 & 4 \\ -2 & 1 & -1 & 0 & 1 & 0 & -1 & 3 \\ -1 & 1 & -1 & 0 & 1 & -1 & 0 & 2 \\ 0 & 1 & -1 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, s_{55} := \begin{pmatrix} 0 & 2 & 0 & -1 & -1 & 1 & 0 & 1 \\ 0 & 3 & -1 & 0 & -2 & 1 & 0 & 1 \\ -1 & 4 & 0 & -1 & -2 & 1 & 0 & 2 \\ -1 & 5 & -1 & 0 & -4 & 2 & 0 & 3 \\ -1 & 4 & -1 & 0 & -3 & 1 & 1 & 2 \\ -1 & 3 & 0 & 0 & -3 & 1 & 1 & 1 \\ 0 & 2 & 0 & 0 & -2 & 0 & 1 & 1 \\ 0 & 1 & 0 & 0 & -1 & 0 & 0 & 1 \end{pmatrix},
\end{aligned}$$

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s_{56} &:= \begin{pmatrix} 1 & 1 & 0 & 0 & -1 & 0 & 0 & -1 \\ 2 & 1 & -1 & 1 & -2 & 1 & -1 & -1 \\ 2 & 2 & -1 & 1 & -2 & 0 & -1 & -1 \\ 3 & 2 & -1 & 2 & -4 & 1 & -2 & -1 \\ 3 & 1 & -1 & 2 & -3 & 0 & -1 & -1 \\ 2 & 1 & 0 & 1 & -2 & 0 & -1 & -1 \\ 2 & 1 & 0 & 0 & -1 & 0 & -1 & 0 \\ 1 & 0 & 0 & 0 & 0 & 0 & -1 & 0 \end{pmatrix}, s_{57} := \begin{pmatrix} -1 & -1 & 0 & 0 & 1 & 0 & 0 & 1 \\ -2 & -1 & 1 & -1 & 2 & -1 & 1 & 1 \\ -2 & -2 & 1 & -1 & 2 & 0 & 1 & 1 \\ -3 & -2 & 1 & -2 & 4 & -1 & 2 & 1 \\ -3 & -1 & 1 & -2 & 3 & 0 & 1 & 1 \\ -2 & -1 & 0 & -1 & 2 & 0 & 1 & 1 \\ -2 & -1 & 0 & 0 & 1 & 0 & 1 & 0 \\ -1 & 0 & 0 & 0 & 0 & 0 & 1 & 0 \end{pmatrix}, \\
s_{58} &:= \begin{pmatrix} -1 & -1 & 2 & -1 & 0 & 1 & 0 & 0 \\ 0 & -1 & 2 & -2 & 0 & 2 & 0 & 0 \\ 0 & -2 & 3 & -2 & 0 & 2 & 0 & 0 \\ 0 & -3 & 4 & -3 & 0 & 3 & 1 & -1 \\ 0 & -2 & 3 & -2 & -1 & 3 & 1 & -1 \\ 0 & -2 & 2 & -1 & -1 & 3 & 0 & -1 \\ 0 & -1 & 1 & -1 & 0 & 2 & 0 & -1 \\ 0 & -1 & 0 & 0 & 0 & 1 & 0 & 0 \end{pmatrix}, s_{59} := \begin{pmatrix} 0 & 1 & -1 & 0 & 0 & 0 & 1 & 0 \\ 1 & 2 & -1 & -1 & 0 & 0 & 2 & -1 \\ 0 & 3 & -1 & -1 & 0 & 0 & 2 & -1 \\ 1 & 4 & -1 & -2 & 0 & 0 & 3 & -1 \\ 1 & 3 & -1 & -1 & 0 & -1 & 3 & -1 \\ 0 & 2 & 0 & -1 & 0 & -1 & 3 & -1 \\ 0 & 2 & 0 & -1 & 0 & -1 & 2 & 0 \\ 0 & 1 & 0 & -1 & 1 & -1 & 1 & 0 \end{pmatrix}, \\
s_{60} &:= \begin{pmatrix} -1 & 0 & 1 & -1 & 1 & 1 & -2 & 1 \\ 0 & 0 & 0 & -1 & 1 & 2 & -3 & 2 \\ -1 & 1 & 1 & -2 & 1 & 3 & -4 & 2 \\ -1 & 1 & 1 & -3 & 2 & 4 & -5 & 3 \\ -1 & 1 & 1 & -3 & 2 & 3 & -4 & 3 \\ -1 & 0 & 1 & -2 & 1 & 3 & -3 & 2 \\ -1 & 0 & 0 & -1 & 1 & 2 & -2 & 1 \\ 0 & 0 & 0 & -1 & 1 & 1 & -1 & 0 \end{pmatrix}, s_{61} := \begin{pmatrix} 1 & 1 & -1 & 1 & -1 & 0 & 0 & -1 \\ 1 & 0 & -1 & 2 & -1 & -1 & 1 & -2 \\ 2 & 0 & -2 & 3 & -2 & 0 & 0 & -2 \\ 2 & 0 & -3 & 5 & -3 & -1 & 1 & -3 \\ 2 & 0 & -3 & 4 & -2 & -1 & 1 & -2 \\ 1 & 0 & -2 & 3 & -2 & 0 & 1 & -2 \\ 1 & 0 & -2 & 2 & -1 & 0 & 1 & -2 \\ 0 & 0 & -1 & 1 & 0 & 0 & 0 & -1 \end{pmatrix}, \\
s_{62} &:= \begin{pmatrix} 1 & 0 & 1 & -1 & 0 & 0 & 0 & -1 \\ 0 & 1 & 2 & -2 & 0 & 0 & 0 & -1 \\ 0 & 0 & 3 & -2 & 0 & 0 & 0 & -2 \\ 0 & 0 & 4 & -3 & 0 & 0 & 0 & -2 \\ 0 & 0 & 3 & -2 & 0 & -1 & 1 & -2 \\ 0 & 0 & 2 & -1 & -1 & 0 & 1 & -2 \\ 0 & 0 & 1 & -1 & 0 & 0 & 1 & -2 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, s_{63} := \begin{pmatrix} 0 & -1 & -1 & 0 & 1 & 1 & -1 & 1 \\ -1 & -1 & 0 & -1 & 2 & 1 & -1 & 1 \\ 0 & -2 & -1 & -1 & 3 & 1 & -1 & 1 \\ 0 & -2 & -1 & -2 & 4 & 2 & -2 & 2 \\ 0 & -2 & 0 & -2 & 3 & 2 & -2 & 2 \\ 0 & -1 & 0 & -2 & 3 & 1 & -2 & 2 \\ 0 & -1 & 0 & -1 & 2 & 1 & -2 & 1 \\ 0 & 0 & 0 & -1 & 1 & 1 & -1 & 0 \end{pmatrix}, \\
s_{64} &:= \begin{pmatrix} -1 & 0 & 1 & -1 & 0 & 1 & 0 & 1 \\ 0 & 0 & 0 & -1 & 0 & 2 & -1 & 2 \\ -1 & 1 & 1 & -2 & 0 & 2 & -1 & 3 \\ -1 & 1 & 1 & -3 & 1 & 3 & -2 & 4 \\ -1 & 1 & 1 & -3 & 1 & 3 & -2 & 3 \\ -1 & 0 & 1 & -2 & 1 & 2 & -2 & 3 \\ -1 & 0 & 1 & -1 & 0 & 2 & -2 & 2 \\ 0 & 0 & 1 & -1 & 0 & 1 & -1 & 1 \end{pmatrix}, s_{65} := \begin{pmatrix} 0 & -2 & 0 & 1 & 0 & 0 & 0 & -1 \\ 1 & -2 & -1 & 1 & 1 & -1 & 0 & -1 \\ 1 & -3 & 0 & 1 & 1 & -1 & 0 & -2 \\ 2 & -4 & -1 & 1 & 2 & -1 & 0 & -3 \\ 2 & -3 & -1 & 1 & 1 & 0 & -1 & -2 \\ 2 & -3 & -1 & 1 & 1 & 0 & -1 & -1 \\ 1 & -2 & -1 & 1 & 1 & 0 & -1 & -1 \\ 1 & -1 & -1 & 1 & 0 & 0 & 0 & -1 \end{pmatrix},
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s_{66} &:= \begin{pmatrix} -1 & 1 & 2 & -2 & 0 & 1 & 0 & 0 \\ -2 & 2 & 2 & -2 & -1 & 2 & 0 & 0 \\ -3 & 2 & 4 & -3 & -1 & 2 & 0 & 0 \\ -4 & 3 & 5 & -4 & -2 & 4 & -1 & 1 \\ -3 & 2 & 4 & -3 & -2 & 3 & 0 & 1 \\ -2 & 1 & 3 & -2 & -2 & 3 & 0 & 0 \\ -1 & 1 & 2 & -2 & -1 & 2 & 0 & 0 \\ -1 & 0 & 1 & -1 & 0 & 1 & 0 & 0 \end{pmatrix}, s_{67} := \begin{pmatrix} 0 & -1 & 0 & 1 & -1 & 1 & 0 & -2 \\ 1 & 0 & -1 & 1 & -1 & 1 & 0 & -3 \\ 1 & -1 & 0 & 1 & -1 & 1 & 0 & -4 \\ 2 & -1 & -1 & 1 & -1 & 2 & 0 & -6 \\ 2 & -1 & -1 & 1 & -1 & 2 & -1 & -4 \\ 2 & -1 & -1 & 1 & -1 & 2 & -1 & -3 \\ 1 & -1 & -1 & 1 & 0 & 1 & -1 & -2 \\ 1 & -1 & -1 & 1 & 0 & 0 & 0 & -1 \end{pmatrix}, \\
s_{68} &:= \begin{pmatrix} 1 & 0 & 0 & 1 & -1 & 0 & -1 & 0 \\ 2 & 1 & -1 & 1 & -1 & 0 & -1 & 0 \\ 2 & 1 & 0 & 1 & -1 & -1 & -1 & 0 \\ 4 & 1 & -1 & 2 & -2 & -1 & -1 & 0 \\ 3 & 0 & -1 & 2 & -1 & -1 & -1 & 0 \\ 2 & 0 & 0 & 1 & -1 & 0 & -1 & 0 \\ 1 & 0 & 0 & 1 & -1 & 0 & -1 & 1 \\ 1 & 0 & 0 & 0 & 0 & 0 & -1 & 1 \end{pmatrix}, s_{69} := \begin{pmatrix} -1 & 0 & 2 & -2 & 1 & 0 & 0 & 1 \\ -2 & 0 & 2 & -2 & 1 & 0 & 0 & 2 \\ -3 & 0 & 4 & -3 & 1 & 0 & 0 & 2 \\ -4 & 0 & 5 & -4 & 1 & 1 & -1 & 4 \\ -3 & 0 & 4 & -3 & 0 & 1 & 0 & 3 \\ -2 & -1 & 3 & -2 & 0 & 1 & 0 & 2 \\ -1 & 0 & 2 & -2 & 0 & 1 & 0 & 1 \\ -1 & 0 & 1 & -1 & 0 & 1 & 0 & 0 \end{pmatrix}, \\
s_{70} &:= \begin{pmatrix} 1 & 0 & 0 & 0 & 0 & -1 & 0 & 0 \\ 2 & -1 & -1 & 1 & 0 & -1 & -1 & 1 \\ 2 & 0 & -1 & 1 & 0 & -2 & -1 & 1 \\ 3 & -1 & -1 & 2 & -1 & -2 & -2 & 2 \\ 3 & -1 & -1 & 2 & -1 & -2 & -1 & 1 \\ 2 & -1 & 0 & 1 & 0 & -2 & -1 & 1 \\ 2 & 0 & 0 & 0 & 0 & -1 & -1 & 1 \\ 1 & 0 & 0 & 0 & 0 & 0 & -1 & 0 \end{pmatrix}, s_{71} := \begin{pmatrix} -1 & 1 & 0 & 0 & 0 & 0 & -1 & 2 \\ -2 & 0 & 1 & 0 & 0 & 0 & -1 & 3 \\ -2 & 1 & 0 & 0 & 0 & 0 & -1 & 4 \\ -3 & 1 & 1 & 0 & 0 & -1 & -1 & 6 \\ -3 & 1 & 1 & 0 & 0 & -1 & 0 & 4 \\ -3 & 1 & 1 & 0 & 0 & -1 & 0 & 3 \\ -2 & 1 & 1 & 0 & -1 & 0 & 0 & 2 \\ -1 & 1 & 1 & -1 & 0 & 0 & 0 & 1 \end{pmatrix}, \\
s_{72} &:= \begin{pmatrix} 0 & -1 & 1 & -1 & 1 & 0 & 1 & -2 \\ 1 & -1 & 0 & -1 & 1 & 1 & 1 & -3 \\ 0 & -1 & 1 & -2 & 2 & 1 & 1 & -4 \\ 1 & -2 & 1 & -2 & 2 & 2 & 1 & -6 \\ 1 & -2 & 1 & -2 & 2 & 2 & 0 & -4 \\ 1 & -1 & 1 & -2 & 1 & 2 & 0 & -3 \\ 1 & -1 & 0 & -1 & 1 & 1 & 0 & -2 \\ 0 & -1 & 0 & 0 & 0 & 1 & 0 & -1 \end{pmatrix}, s_{73} := \begin{pmatrix} 1 & 0 & -2 & 1 & 0 & 0 & 1 & -2 \\ 2 & 1 & -3 & 0 & 1 & 0 & 1 & -2 \\ 2 & 1 & -4 & 1 & 1 & -1 & 2 & -3 \\ 4 & 1 & -6 & 1 & 2 & -1 & 2 & -4 \\ 3 & 1 & -5 & 1 & 2 & -1 & 1 & -3 \\ 2 & 1 & -3 & 0 & 2 & -1 & 1 & -3 \\ 1 & 1 & -2 & 0 & 1 & 0 & 0 & -2 \\ 0 & 0 & -1 & 0 & 1 & 0 & 0 & -1 \end{pmatrix}, \\
s_{74} &:= \begin{pmatrix} 0 & -1 & 0 & 1 & -1 & 0 & 2 & -2 \\ 1 & -1 & -1 & 1 & 0 & -1 & 3 & -3 \\ 0 & -2 & 0 & 1 & 0 & -1 & 4 & -4 \\ 1 & -3 & -1 & 2 & 0 & -2 & 6 & -6 \\ 1 & -3 & -1 & 2 & 0 & -1 & 4 & -5 \\ 1 & -2 & -1 & 1 & 0 & 0 & 3 & -4 \\ 0 & -1 & -1 & 1 & 0 & 0 & 2 & -3 \\ 0 & -1 & -1 & 1 & 0 & 0 & 1 & -1 \end{pmatrix}, s_{75} := \begin{pmatrix} 0 & 2 & 0 & -1 & 0 & -1 & 1 & 0 \\ 0 & 3 & 1 & -2 & 0 & -1 & 1 & -1 \\ 0 & 4 & 1 & -2 & -1 & -1 & 1 & 0 \\ -1 & 6 & 2 & -3 & -1 & -2 & 2 & -1 \\ -1 & 4 & 2 & -2 & -1 & -2 & 2 & -1 \\ 0 & 3 & 1 & -1 & -1 & -2 & 2 & -1 \\ 0 & 2 & 1 & -1 & 0 & -2 & 1 & 0 \\ 0 & 1 & 0 & 0 & 0 & -1 & 0 & 0 \end{pmatrix},
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s_{76} &:= \begin{pmatrix} -1 & 0 & 0 & -1 & 2 & 0 & -1 & 1 \\ -2 & 0 & 1 & -2 & 3 & -1 & 0 & 1 \\ -2 & 1 & 1 & -3 & 4 & -1 & -1 & 2 \\ -3 & 1 & 1 & -4 & 6 & -2 & 0 & 2 \\ -3 & 1 & 1 & -3 & 4 & -1 & 0 & 2 \\ -2 & 1 & 0 & -2 & 3 & -1 & 0 & 2 \\ -2 & 1 & 0 & -1 & 2 & -1 & 0 & 1 \\ -1 & 1 & 0 & -1 & 1 & 0 & 0 & 0 \end{pmatrix}, s_{77} := \begin{pmatrix} -1 & 0 & 0 & -1 & 1 & 0 & 1 & 0 \\ -1 & 0 & 0 & -1 & 1 & -1 & 3 & -1 \\ -2 & 1 & 0 & -2 & 2 & -1 & 3 & -1 \\ -2 & 1 & -1 & -2 & 2 & -1 & 5 & -2 \\ -2 & 1 & -1 & -1 & 1 & -1 & 4 & -1 \\ -1 & 1 & -1 & -1 & 1 & -1 & 3 & -1 \\ -1 & 0 & -1 & 0 & 1 & -1 & 2 & -1 \\ -1 & 0 & 0 & 0 & 0 & 0 & 1 & -1 \end{pmatrix}, \\
s_{78} &:= \begin{pmatrix} 0 & 0 & -1 & 2 & -1 & -1 & 0 & 0 \\ 0 & -1 & -2 & 3 & 0 & -2 & 0 & 0 \\ 0 & -1 & -2 & 4 & -1 & -3 & 1 & 0 \\ 1 & -2 & -4 & 6 & -1 & -4 & 1 & 0 \\ 1 & -2 & -3 & 5 & -1 & -3 & 1 & -1 \\ 1 & -2 & -2 & 4 & -1 & -2 & 0 & 0 \\ 1 & -1 & -2 & 3 & -1 & -1 & 0 & 0 \\ 1 & 0 & -1 & 1 & 0 & -1 & 0 & 0 \end{pmatrix}, s_{79} := \begin{pmatrix} 1 & -1 & 0 & 0 & 1 & -1 & -1 & 2 \\ 1 & -1 & 0 & 0 & 1 & -1 & -2 & 3 \\ 2 & -2 & 0 & 0 & 1 & -1 & -2 & 4 \\ 2 & -2 & 1 & -1 & 2 & -2 & -3 & 6 \\ 1 & -2 & 1 & -1 & 2 & -1 & -3 & 5 \\ 0 & -2 & 1 & 0 & 1 & -1 & -2 & 4 \\ 0 & -1 & 1 & 0 & 0 & 0 & -2 & 3 \\ 0 & 0 & 0 & 0 & 0 & 0 & -1 & 2 \end{pmatrix}, \\
s_{80} &:= \begin{pmatrix} -1 & 0 & 0 & 0 & 1 & 0 & -2 & 2 \\ -2 & 0 & 1 & 0 & 1 & 0 & -3 & 2 \\ -2 & 0 & 1 & 0 & 1 & 0 & -4 & 4 \\ -4 & 0 & 2 & 0 & 2 & -1 & -5 & 5 \\ -4 & 0 & 2 & 0 & 1 & 0 & -4 & 4 \\ -3 & 0 & 1 & 1 & 0 & 0 & -3 & 3 \\ -2 & 1 & 1 & 0 & 0 & 0 & -2 & 2 \\ -1 & 1 & 0 & 0 & 0 & 0 & -1 & 1 \end{pmatrix}, s_{81} := \begin{pmatrix} 1 & -1 & 1 & -1 & 1 & -1 & 1 & 0 \\ 2 & -1 & 1 & -2 & 2 & -1 & 0 & 1 \\ 2 & -2 & 1 & -2 & 3 & -2 & 1 & 1 \\ 3 & -3 & 2 & -3 & 4 & -2 & 0 & 2 \\ 3 & -2 & 1 & -2 & 3 & -2 & 0 & 2 \\ 2 & -1 & 1 & -2 & 3 & -2 & 0 & 1 \\ 1 & -1 & 1 & -1 & 2 & -2 & 0 & 1 \\ 0 & 0 & 1 & -1 & 1 & -1 & 0 & 1 \end{pmatrix}, \\
s_{82} &:= \begin{pmatrix} 1 & -1 & -1 & 2 & -1 & 0 & -1 & 0 \\ 0 & -1 & -1 & 3 & -1 & -1 & -1 & 0 \\ 0 & -2 & -1 & 4 & -2 & 0 & -2 & 0 \\ 0 & -3 & -2 & 6 & -2 & -1 & -3 & 1 \\ 0 & -2 & -2 & 5 & -2 & 0 & -3 & 1 \\ 0 & -2 & -1 & 4 & -2 & 0 & -2 & 1 \\ 0 & -1 & -1 & 3 & -2 & 0 & -1 & 1 \\ 0 & 0 & 0 & 1 & -1 & 0 & -1 & 1 \end{pmatrix}, s_{83} := \begin{pmatrix} 1 & 1 & -1 & -1 & 0 & 2 & -1 & 0 \\ 0 & 2 & -1 & -2 & 1 & 2 & -1 & 0 \\ 0 & 2 & -1 & -2 & 0 & 4 & -2 & 0 \\ 0 & 4 & -1 & -4 & 1 & 5 & -3 & 0 \\ 0 & 3 & -1 & -3 & 1 & 4 & -3 & 0 \\ 0 & 2 & 0 & -3 & 1 & 3 & -2 & 0 \\ 0 & 2 & 0 & -2 & 0 & 2 & -1 & 0 \\ 0 & 1 & 0 & -1 & 0 & 1 & 0 & -1 \end{pmatrix}, \\
s_{84} &:= \begin{pmatrix} 0 & 2 & -1 & -1 & 0 & 1 & 0 & 0 \\ 1 & 2 & -1 & -2 & 0 & 2 & 0 & 0 \\ 0 & 3 & -1 & -2 & -1 & 3 & 0 & 0 \\ 1 & 4 & -2 & -3 & -1 & 4 & 1 & -1 \\ 1 & 3 & -2 & -2 & -1 & 3 & 1 & -1 \\ 0 & 2 & -1 & -2 & 0 & 2 & 1 & -1 \\ 0 & 1 & -1 & -1 & 0 & 2 & 0 & -1 \\ 0 & 0 & -1 & 0 & 0 & 1 & 0 & 0 \end{pmatrix}, s_{85} := \begin{pmatrix} 0 & -2 & 0 & 1 & 1 & -2 & 1 & 0 \\ 0 & -3 & 0 & 1 & 2 & -2 & 0 & 1 \\ 0 & -3 & 0 & 1 & 3 & -4 & 1 & 1 \\ 0 & -5 & 1 & 1 & 4 & -5 & 1 & 2 \\ 0 & -4 & 1 & 1 & 3 & -4 & 1 & 1 \\ -1 & -3 & 1 & 1 & 2 & -3 & 1 & 1 \\ -1 & -2 & 1 & 1 & 1 & -2 & 0 & 1 \\ 0 & -1 & 0 & 1 & 0 & -1 & 0 & 1 \end{pmatrix},
\end{aligned}$$

$$\begin{aligned}
s_{86} &:= \begin{pmatrix} 1 & 1 & 1 & -1 & 0 & -1 & 0 & 0 \\ 2 & 1 & 1 & -1 & 0 & -2 & 1 & 0 \\ 3 & 1 & 1 & -1 & 0 & -2 & 0 & 0 \\ 4 & 2 & 1 & -1 & 0 & -4 & 1 & 0 \\ 3 & 1 & 1 & -1 & 1 & -4 & 1 & 0 \\ 2 & 1 & 1 & -1 & 1 & -3 & 0 & 1 \\ 2 & 1 & 0 & -1 & 1 & -2 & 0 & 1 \\ 1 & 0 & 0 & 0 & 0 & -1 & 0 & 1 \end{pmatrix}, s_{87} := \begin{pmatrix} -1 & -1 & -1 & 1 & 0 & 1 & 0 & 0 \\ -2 & -1 & -1 & 1 & 0 & 2 & -1 & 0 \\ -3 & -1 & -1 & 1 & 0 & 2 & 0 & 0 \\ -4 & -2 & -1 & 1 & 0 & 4 & -1 & 0 \\ -3 & -1 & -1 & 1 & -1 & 4 & -1 & 0 \\ -2 & -1 & -1 & 1 & -1 & 3 & 0 & -1 \\ -2 & -1 & 0 & 1 & -1 & 2 & 0 & -1 \\ -1 & 0 & 0 & 0 & 0 & 1 & 0 & -1 \end{pmatrix}, \\
s_{88} &:= \begin{pmatrix} 0 & 2 & 0 & -1 & -1 & 2 & -1 & 0 \\ 0 & 3 & 0 & -1 & -2 & 2 & 0 & -1 \\ 0 & 3 & 0 & -1 & -3 & 4 & -1 & -1 \\ 0 & 5 & -1 & -1 & -4 & 5 & -1 & -2 \\ 0 & 4 & -1 & -1 & -3 & 4 & -1 & -1 \\ 1 & 3 & -1 & -1 & -2 & 3 & -1 & -1 \\ 1 & 2 & -1 & -1 & -1 & 2 & 0 & -1 \\ 0 & 1 & 0 & -1 & 0 & 1 & 0 & -1 \end{pmatrix}, s_{89} := \begin{pmatrix} 0 & 1 & 1 & -1 & -1 & 1 & 0 & 1 \\ 0 & 2 & 0 & -1 & -1 & 1 & 0 & 2 \\ 0 & 3 & 1 & -2 & -1 & 1 & 0 & 2 \\ 0 & 4 & 1 & -3 & -1 & 1 & 1 & 3 \\ 0 & 3 & 1 & -2 & -1 & 0 & 1 & 3 \\ 1 & 2 & 0 & -1 & -1 & 0 & 1 & 2 \\ 1 & 1 & 0 & -1 & 0 & 0 & 0 & 2 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \\
s_{90} &:= \begin{pmatrix} 0 & 0 & 0 & 1 & -1 & -1 & 2 & -2 \\ 0 & 0 & 1 & 0 & 0 & -2 & 3 & -3 \\ 0 & -1 & 1 & 1 & -1 & -2 & 4 & -4 \\ 0 & -1 & 1 & 1 & 0 & -4 & 6 & -6 \\ 0 & -1 & 1 & 1 & 0 & -3 & 4 & -5 \\ 1 & -1 & 0 & 1 & 0 & -2 & 3 & -4 \\ 0 & -1 & 0 & 1 & 0 & -1 & 2 & -3 \\ 0 & -1 & 0 & 1 & 0 & -1 & 1 & -1 \end{pmatrix}, s_{91} := \begin{pmatrix} 0 & 0 & 1 & -1 & 0 & -1 & 2 & 0 \\ 0 & 1 & 1 & -1 & -1 & -1 & 3 & -1 \\ -1 & 1 & 2 & -2 & 0 & -2 & 4 & -1 \\ 0 & 2 & 2 & -3 & 0 & -3 & 6 & -2 \\ 0 & 2 & 2 & -3 & 0 & -2 & 4 & -1 \\ 0 & 2 & 1 & -2 & 0 & -2 & 3 & 0 \\ 0 & 1 & 1 & -1 & 0 & -2 & 2 & 0 \\ 0 & 1 & 1 & -1 & 0 & -1 & 1 & 0 \end{pmatrix}, \\
s_{92} &:= \begin{pmatrix} 0 & -2 & 1 & 0 & 0 & 1 & 0 & -1 \\ 1 & -2 & 0 & 0 & 0 & 2 & 0 & -2 \\ 0 & -3 & 1 & 0 & 0 & 3 & -1 & -2 \\ 1 & -4 & 1 & 0 & 0 & 4 & -1 & -3 \\ 0 & -3 & 1 & 0 & 0 & 3 & 0 & -3 \\ 0 & -3 & 0 & 1 & 0 & 2 & 0 & -2 \\ 0 & -2 & 0 & 0 & 1 & 1 & 0 & -1 \\ 0 & -1 & 0 & 0 & 1 & 0 & 0 & -1 \end{pmatrix}, s_{93} := \begin{pmatrix} -1 & -1 & -1 & 2 & -1 & 1 & 0 & -1 \\ -2 & -1 & -1 & 2 & -1 & 2 & -1 & 0 \\ -2 & -2 & -2 & 3 & -1 & 2 & 0 & -1 \\ -3 & -3 & -3 & 5 & -2 & 3 & -1 & 0 \\ -3 & -2 & -2 & 4 & -2 & 2 & 0 & 0 \\ -2 & -2 & -1 & 3 & -2 & 2 & 0 & 0 \\ -2 & -2 & 0 & 2 & -1 & 1 & 0 & 0 \\ -1 & -1 & 0 & 1 & 0 & 0 & 0 & 0 \end{pmatrix}, \\
s_{94} &:= \begin{pmatrix} 0 & 0 & -2 & 2 & -1 & 0 & 1 & -1 \\ 0 & -1 & -2 & 3 & -1 & -1 & 2 & -2 \\ 1 & -1 & -4 & 4 & -1 & -1 & 2 & -2 \\ 1 & -1 & -5 & 6 & -2 & -2 & 3 & -3 \\ 1 & -1 & -4 & 5 & -2 & -1 & 2 & -2 \\ 0 & -1 & -3 & 4 & -1 & -1 & 1 & -1 \\ 0 & -1 & -2 & 3 & -1 & 0 & 0 & -1 \\ 0 & 0 & -1 & 1 & 0 & 0 & 0 & -1 \end{pmatrix}, s_{95} := \begin{pmatrix} -1 & 1 & 1 & -2 & 1 & 0 & 1 & 0 \\ 0 & 2 & 0 & -3 & 2 & 0 & 1 & 0 \\ -1 & 2 & 1 & -4 & 3 & 0 & 1 & 0 \\ -1 & 4 & 1 & -6 & 4 & 0 & 1 & 1 \\ -1 & 3 & 1 & -5 & 4 & -1 & 1 & 1 \\ -1 & 2 & 1 & -4 & 3 & 0 & 0 & 1 \\ 0 & 1 & 1 & -3 & 2 & 0 & 0 & 1 \\ 0 & 1 & 1 & -2 & 1 & 0 & 0 & 0 \end{pmatrix},
\end{aligned}$$

$$\begin{aligned}
s_{96} &:= \begin{pmatrix} 1 & -1 & 0 & -1 & 2 & -1 & 0 & 0 \\ 1 & -1 & 0 & -1 & 2 & -2 & 1 & 0 \\ 1 & -1 & 0 & -2 & 4 & -3 & 1 & 0 \\ 2 & -1 & 0 & -3 & 5 & -4 & 2 & -1 \\ 2 & -1 & 0 & -2 & 4 & -4 & 2 & -1 \\ 1 & -1 & 0 & -1 & 3 & -3 & 1 & -1 \\ 0 & -1 & 1 & -1 & 2 & -2 & 1 & -1 \\ 0 & -1 & 0 & 0 & 1 & -1 & 1 & -1 \end{pmatrix}, s_{97} := \begin{pmatrix} -1 & 1 & 1 & -2 & 1 & 0 & 1 & 0 \\ 0 & 1 & 1 & -3 & 1 & 1 & 1 & 0 \\ 0 & 2 & 1 & -4 & 2 & 0 & 2 & 0 \\ 0 & 3 & 2 & -6 & 2 & 1 & 3 & -1 \\ 0 & 2 & 2 & -5 & 2 & 0 & 3 & -1 \\ 0 & 2 & 1 & -4 & 2 & 0 & 2 & -1 \\ 0 & 1 & 1 & -3 & 2 & 0 & 1 & -1 \\ 0 & 0 & 0 & -1 & 1 & 0 & 1 & -1 \end{pmatrix}, \\
s_{98} &:= \begin{pmatrix} 1 & -1 & 0 & 0 & 1 & -2 & 1 & 0 \\ 1 & -1 & 0 & 0 & 1 & -2 & 0 & 1 \\ 2 & -1 & 0 & 0 & 1 & -3 & 1 & 0 \\ 2 & -1 & 0 & 0 & 2 & -5 & 1 & 1 \\ 2 & 0 & 0 & -1 & 2 & -4 & 1 & 1 \\ 1 & 0 & 0 & -1 & 2 & -3 & 1 & 0 \\ 1 & 0 & -1 & 0 & 1 & -2 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & -1 & 1 & 0 \end{pmatrix}, s_{99} := \begin{pmatrix} 0 & 0 & 1 & -2 & 2 & 0 & -1 & 1 \\ 0 & -1 & 1 & -2 & 3 & 0 & -2 & 1 \\ 0 & 0 & 2 & -4 & 4 & 0 & -2 & 1 \\ 0 & 0 & 2 & -5 & 6 & 0 & -4 & 2 \\ 0 & 0 & 1 & -4 & 5 & 0 & -3 & 2 \\ 1 & 0 & 0 & -3 & 4 & 0 & -2 & 1 \\ 1 & 0 & 0 & -2 & 3 & -1 & -1 & 1 \\ 1 & 0 & 0 & -1 & 1 & 0 & -1 & 1 \end{pmatrix}, \\
s_{100} &:= \begin{pmatrix} -1 & 1 & 1 & -1 & 0 & 1 & -2 & 1 \\ -1 & 1 & 1 & -1 & 0 & 1 & -3 & 3 \\ -1 & 2 & 1 & -2 & 1 & 1 & -4 & 3 \\ -2 & 2 & 1 & -2 & 1 & 2 & -6 & 5 \\ -1 & 1 & 1 & -2 & 1 & 2 & -5 & 4 \\ 0 & 1 & 0 & -1 & 0 & 2 & -4 & 3 \\ 0 & 1 & 0 & -1 & 0 & 1 & -2 & 2 \\ 0 & 1 & 0 & -1 & 0 & 1 & -1 & 1 \end{pmatrix}, s_{101} := \begin{pmatrix} 1 & 1 & -1 & 0 & 0 & 1 & -2 & 0 \\ 2 & 1 & -3 & 1 & 0 & 1 & -2 & 0 \\ 2 & 2 & -3 & 1 & 0 & 1 & -3 & 0 \\ 3 & 2 & -5 & 2 & 0 & 2 & -5 & 1 \\ 2 & 2 & -4 & 2 & -1 & 2 & -4 & 1 \\ 1 & 2 & -3 & 1 & 0 & 1 & -3 & 1 \\ 1 & 2 & -2 & 0 & 0 & 1 & -2 & 1 \\ 0 & 1 & -1 & 0 & 0 & 1 & -1 & 0 \end{pmatrix}, \\
s_{102} &:= \begin{pmatrix} 0 & 0 & 1 & -2 & 1 & 0 & 1 & 0 \\ 1 & 1 & 0 & -3 & 2 & 0 & 1 & 0 \\ 1 & 0 & 1 & -4 & 3 & 0 & 1 & 0 \\ 2 & 1 & 1 & -6 & 4 & 0 & 2 & -1 \\ 2 & 1 & 1 & -5 & 3 & 0 & 2 & -1 \\ 1 & 1 & 1 & -4 & 2 & 1 & 1 & -1 \\ 0 & 1 & 1 & -3 & 2 & 0 & 1 & -1 \\ 0 & 0 & 0 & -1 & 1 & 0 & 1 & -1 \end{pmatrix}, s_{103} := \begin{pmatrix} 1 & 0 & 0 & 1 & -1 & 0 & -1 & 0 \\ 1 & 0 & 0 & 1 & -1 & 1 & -3 & 1 \\ 2 & -1 & 0 & 2 & -2 & 1 & -3 & 1 \\ 2 & -1 & 1 & 2 & -2 & 1 & -5 & 2 \\ 2 & -1 & 1 & 1 & -1 & 1 & -4 & 1 \\ 1 & -1 & 1 & 1 & -1 & 1 & -3 & 1 \\ 1 & 0 & 1 & 0 & -1 & 1 & -2 & 1 \\ 1 & 0 & 0 & 0 & 0 & 0 & -1 & 1 \end{pmatrix}, \\
s_{104} &:= \begin{pmatrix} 0 & 1 & 0 & 0 & -1 & 0 & 0 & 2 \\ 0 & 3 & 0 & -1 & -1 & 0 & 0 & 2 \\ 0 & 3 & 1 & -1 & -2 & 0 & 0 & 3 \\ -1 & 5 & 1 & -1 & -3 & 0 & 0 & 4 \\ -1 & 4 & 1 & -1 & -2 & 0 & -1 & 4 \\ -1 & 3 & 1 & -1 & -2 & 1 & -1 & 3 \\ -1 & 2 & 1 & -1 & -1 & 1 & -1 & 2 \\ -1 & 1 & 1 & -1 & 0 & 0 & 0 & 1 \end{pmatrix}, s_{105} := \begin{pmatrix} 0 & 0 & 1 & 0 & -2 & 1 & 1 & 0 \\ -1 & 1 & 2 & 0 & -3 & 1 & 1 & 0 \\ -1 & 0 & 3 & 0 & -4 & 2 & 1 & 0 \\ -2 & 1 & 4 & 0 & -6 & 3 & 1 & 1 \\ -2 & 0 & 3 & 1 & -5 & 2 & 1 & 1 \\ -1 & 0 & 2 & 1 & -4 & 1 & 1 & 1 \\ -1 & 0 & 2 & 0 & -2 & 0 & 1 & 1 \\ 0 & 0 & 1 & 0 & -1 & 0 & 0 & 1 \end{pmatrix},
\end{aligned}$$

$$\begin{aligned}
s_{106} &:= \begin{pmatrix} -1 & -1 & 1 & 0 & 0 & 0 & -1 & 2 \\ -2 & -1 & 1 & 0 & 1 & -1 & -1 & 2 \\ -2 & -1 & 1 & 0 & 1 & -1 & -2 & 4 \\ -3 & -1 & 2 & -1 & 2 & -2 & -2 & 5 \\ -2 & -1 & 1 & 0 & 1 & -2 & -1 & 4 \\ -1 & -1 & 1 & 0 & 1 & -2 & -1 & 3 \\ 0 & -1 & 0 & 0 & 1 & -1 & -1 & 2 \\ 0 & -1 & 0 & 0 & 1 & -1 & 0 & 1 \end{pmatrix}, s_{107} := \begin{pmatrix} 0 & 1 & 0 & -2 & 2 & 0 & -1 & 1 \\ -1 & 1 & 0 & -2 & 2 & 0 & -1 & 2 \\ 0 & 1 & 0 & -3 & 3 & 0 & -2 & 3 \\ -1 & 1 & 0 & -4 & 5 & -1 & -2 & 4 \\ -1 & 0 & 0 & -3 & 4 & 0 & -2 & 3 \\ 0 & 0 & -1 & -2 & 3 & 0 & -1 & 2 \\ 0 & 0 & -1 & -1 & 2 & 0 & -1 & 1 \\ 0 & 0 & 0 & -1 & 1 & 0 & 0 & 0 \end{pmatrix}, \\
s_{108} &:= \begin{pmatrix} 0 & 1 & 0 & 0 & -1 & -1 & 2 & 0 \\ 0 & 2 & 0 & 0 & -1 & -2 & 3 & -1 \\ -1 & 2 & 1 & 0 & -2 & -2 & 4 & -1 \\ -1 & 3 & 0 & 1 & -3 & -3 & 6 & -2 \\ -1 & 2 & 0 & 1 & -2 & -3 & 5 & -2 \\ 0 & 1 & 0 & 1 & -2 & -2 & 4 & -2 \\ 0 & 0 & 0 & 1 & -1 & -2 & 3 & -1 \\ 0 & 0 & 0 & 1 & -1 & -1 & 1 & 0 \end{pmatrix}, s_{109} := \begin{pmatrix} 0 & 1 & -1 & 0 & -1 & 2 & -1 & 0 \\ 0 & 3 & -1 & -1 & -1 & 2 & -1 & 0 \\ 0 & 3 & -1 & -1 & -2 & 3 & -1 & 0 \\ 1 & 5 & -2 & -2 & -2 & 4 & -2 & 0 \\ 1 & 4 & -2 & -1 & -2 & 3 & -2 & 1 \\ 1 & 3 & -2 & 0 & -2 & 2 & -1 & 0 \\ 0 & 2 & -1 & 0 & -1 & 1 & -1 & 0 \\ 0 & 1 & -1 & 0 & 0 & 0 & 0 & 0 \end{pmatrix}, \\
s_{110} &:= \begin{pmatrix} -2 & 0 & 1 & 0 & 1 & -1 & 0 & -1 \\ -3 & 1 & 1 & -1 & 2 & -1 & 0 & -1 \\ -4 & 1 & 2 & -1 & 2 & -1 & -1 & -1 \\ -6 & 1 & 2 & -1 & 3 & -1 & -1 & -2 \\ -5 & 1 & 2 & -1 & 2 & -1 & 0 & -2 \\ -4 & 0 & 2 & -1 & 2 & -1 & 0 & -1 \\ -2 & 0 & 1 & -1 & 2 & -1 & 0 & -1 \\ -1 & 0 & 0 & 0 & 1 & -1 & 0 & 0 \end{pmatrix}, s_{111} := \begin{pmatrix} 0 & -1 & 0 & 1 & 0 & 0 & -2 & 1 \\ -1 & -2 & 1 & 1 & 1 & -1 & -2 & 1 \\ -1 & -3 & 1 & 2 & 0 & 0 & -3 & 1 \\ -2 & -4 & 2 & 3 & 0 & -1 & -4 & 2 \\ -1 & -4 & 1 & 3 & 0 & -1 & -3 & 2 \\ 0 & -3 & 1 & 2 & 0 & -1 & -2 & 1 \\ 0 & -2 & 0 & 2 & 0 & -1 & -1 & 0 \\ 0 & -1 & 0 & 1 & 0 & -1 & 0 & 0 \end{pmatrix}, \\
s_{112} &:= \begin{pmatrix} 1 & -1 & -1 & 1 & 0 & 0 & -1 & 0 \\ 0 & -2 & 0 & 1 & 0 & 0 & -1 & 0 \\ 1 & -2 & -1 & 2 & -1 & 0 & -1 & 0 \\ 1 & -4 & -1 & 3 & -1 & 0 & -1 & -1 \\ 1 & -3 & -1 & 2 & -1 & 1 & -1 & -1 \\ 1 & -2 & -1 & 1 & 0 & 0 & 0 & -1 \\ 0 & -1 & -1 & 1 & 0 & 0 & 0 & -1 \\ 0 & -1 & -1 & 1 & 0 & 0 & 0 & 0 \end{pmatrix}.
\end{aligned}$$

The character table of $G^{s_1} = G$:

	10										20									
$\chi_1^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_1^{(2)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	1	1	1
$\chi_1^{(3)}$	8	-8	.	-2	2	.	-1	1	-4	4	.	4	-4	.	-2	2	1	-1	1	-1
$\chi_1^{(4)}$	8	-8	.	-2	2	.	-1	1	-4	4	.	4	-4	.	2	-2	-1	1	1	-1
$\chi_1^{(5)}$	28	28	-1	3	3	4	.	.	10	10	-2	8	8	-4	.	.	.	.	2	2
$\chi_1^{(6)}$	28	28	-1	3	3	4	.	.	10	10	-2	8	8	-4	.	.	.	.	2	2
$\chi_1^{(7)}$	35	35	.	.	.	-5	.	.	5	5	1	7	7	3	-3	-3	.	.	-2	-2
$\chi_1^{(8)}$	35	35	.	.	.	-5	.	.	5	5	1	7	7	3	3	3	.	.	-2	-2
$\chi_1^{(9)}$	50	50	.	.	.	10	.	.	5	5	.	-2	-2	18	2	2	-1	-1	1	1
$\chi_1^{(10)}$	50	50	.	.	.	10	.	.	5	5	.	-2	-2	18	-2	-2	1	1	1	1
$\chi_1^{(11)}$	56	-56	.	-4	4	.	1	-1	-16	16	.	12	-12	.	2	-2	-1	1	3	-3
$\chi_1^{(12)}$	56	-56	.	-4	4	.	1	-1	-16	16	.	12	-12	.	-2	2	1	-1	3	-3
$\chi_1^{(13)}$	70	70	1	5	5	6	-1	-1	19	19	2	14	14	6	.	.	.	.	2	2
$\chi_1^{(14)}$	84	84	-1	-1	-1	4	-1	-1	-6	-6	.	4	4	20	2	2	-1	-1	1	1
$\chi_1^{(15)}$	84	84	-1	-1	-1	4	-1	-1	-6	-6	.	4	4	20	-2	-2	1	1	1	1
$\chi_1^{(16)}$	112	-112	.	2	-2	.	1	-1	4	-4	.	8	-8	.	-4	4	-1	1	-1	1
$\chi_1^{(17)}$	112	-112	.	2	-2	.	1	-1	4	-4	.	8	-8	.	4	-4	1	-1	-1	1
$\chi_1^{(18)}$	160	-160	.	.	.	.	.	.	-20	20	.	16	-16	.	.	.	.	.	-2	2
$\chi_1^{(19)}$	160	-160	.	.	.	.	.	.	-20	20	.	16	-16	.	.	.	.	.	-2	2
$\chi_1^{(20)}$	168	168	-1	3	3	24	.	.	15	15	.	8	8	40	.	.	.	.	-4	-4
$\chi_1^{(21)}$	175	175	.	.	.	15	.	.	-5	-5	-1	-1	-1	-17	1	1	1	1	-1	-1
$\chi_1^{(22)}$	175	175	.	.	.	15	.	.	-5	-5	-1	-1	-1	-17	-1	-1	-1	-1	-1	-1
$\chi_1^{(23)}$	210	210	.	.	.	10	.	.	-15	-15	.	6	6	-14	-2	-2	1	1	3	3
$\chi_1^{(24)}$	210	210	.	.	.	10	.	.	-15	-15	.	6	6	-14	2	2	-1	-1	3	3
$\chi_1^{(25)}$	300	300	.	.	.	20	.	.	30	30	2	8	8	12	.	.	.	.	2	2
$\chi_1^{(26)}$	300	300	.	.	.	20	.	.	30	30	2	8	8	12	.	.	.	.	2	2
$\chi_1^{(27)}$	350	350	.	.	.	-10	.	.	35	35	.	26	26	-2	4	4	1	1	-1	-1
$\chi_1^{(28)}$	350	350	.	.	.	-10	.	.	35	35	.	26	26	-2	-4	-4	-1	-1	-1	-1
$\chi_1^{(29)}$	400	-400	.	.	.	.	.	.	-20	20	.	-8	8	.	-4	4	-1	1	1	-1
$\chi_1^{(30)}$	400	-400	.	.	.	.	.	.	-20	20	.	-8	8	.	4	-4	1	-1	1	-1
$\chi_1^{(31)}$	420	420	1	5	5	36	-1	-1	24	24	.	12	12	-28	.	.	.	.	-6	-6
$\chi_1^{(32)}$	448	-448	.	-2	2	.	-1	1	-44	44	.	32	-32	.	.	.	.	.	-4	4
$\chi_1^{(33)}$	448	-448	.	-2	2	.	-1	1	16	-16	.	.	.	.	.	.	.	.	.	.
$\chi_1^{(34)}$	448	-448	.	-2	2	.	-1	1	16	-16	.	.	.	.	.	.	.	.	.	.
$\chi_1^{(35)}$	525	525	.	.	.	5	.	.	30	30	-1	-7	-7	45	-3	-3	.	.	2	2
$\chi_1^{(36)}$	525	525	.	.	.	5	.	.	30	30	-1	-7	-7	45	3	3	.	.	2	2
$\chi_1^{(37)}$	560	-560	.	.	.	.	.	.	20	-20	.	8	-8	.	.	.	.	.	2	-2
$\chi_1^{(38)}$	560	-560	.	.	.	.	.	.	20	-20	.	8	-8	.	.	.	.	.	2	-2
$\chi_1^{(39)}$	567	567	1	-3	-3	-9	.	.	.	.	-1	15	15	-9	1	1	1	1	-3	-3
$\chi_1^{(40)}$	567	567	1	-3	-3	-9	.	.	.	.	-1	15	15	-9	-1	-1	-1	-1	-3	-3
$\chi_1^{(41)}$	700	700	.	.	.	-20	.	.	10	10	.	-4	-4	-4	2	2	-1	-1	-1	-1
$\chi_1^{(42)}$	700	700	.	.	.	-20	.	.	10	10	.	-4	-4	-4	-2	-2	1	1	-1	-1
$\chi_1^{(43)}$	700	700	.	.	.	20	.	.	-20	-20	2	.	.	92	.	.	.	.	.	-4
$\chi_1^{(44)}$	700	700	.	.	.	20	.	.	-20	-20	2	.	.	92	.	.	.	.	.	-4
$\chi_1^{(45)}$	840	-840	.	.	.	.	.	.	-60	60	.	20	-20	.	-2	2	1	-1	5	-5

	10										20											
$\chi_1^{(46)}$	840	-840	.	.	.	.	.	.	-60	60	.	20	-20	.	2	-2	-1	1	5	-5	-3	3
$\chi_1^{(47)}$	840	840	.	.	.	-40	.	.	30	30	.	16	16	8	.	.	.	.	4	4	8	8
$\chi_1^{(48)}$	840	840	.	.	.	-40	.	.	30	30	.	16	16	8	.	.	.	.	4	4	8	8
$\chi_1^{(49)}$	972	972	1	-3	-3	36	.	.	.	.	-2	.	.	108	.	.	.	.	.	.	.
$\chi_1^{(50)}$	972	972	1	-3	-3	36	.	.	.	.	-2	.	.	108	.	.	.	.	.	.	.
$\chi_1^{(51)}$	1008	-1008	.	-2	2	.	-1	1	36	-36	.	8	-8	.	.	.	.	.	2	-2	-6	6
$\chi_1^{(52)}$	1008	-1008	.	-2	2	.	-1	1	36	-36	.	8	-8	.	.	.	.	.	2	-2	-6	6
$\chi_1^{(53)}$	1050	1050	.	.	.	-30	.	.	15	15	.	-10	-10	58	4	4	1	1	-1	-1	-17	-17
$\chi_1^{(54)}$	1050	1050	.	.	.	-30	.	.	15	15	.	-10	-10	58	-4	-4	-1	-1	-1	-1	-17	-17
$\chi_1^{(55)}$	1134	1134	.	4	4	30	1	1	81	81	-2	30	30	-18	.	.	.	.	.	.	.
$\chi_1^{(56)}$	1296	-1296	.	6	-6	.	.	.	.	.	.	24	-24	.	4	-4	1	-1	-3	3	9	-9
$\chi_1^{(57)}$	1296	-1296	.	6	-6	.	.	.	.	.	.	24	-24	.	-4	4	-1	1	-3	3	9	-9
$\chi_1^{(58)}$	1344	1344	.	4	4	.	1	1	-24	-24	.	.	.	64	.	.	.	.	.	.	4	4
$\chi_1^{(59)}$	1344	1344	.	4	4	.	1	1	-24	-24	.	.	.	64	.	.	.	.	.	.	4	4
$\chi_1^{(60)}$	1344	-1344	.	-6	6	.	.	.	-60	60	.	32	-32	.	.	.	.	.	-4	4	-12	12
$\chi_1^{(61)}$	1400	1400	.	.	.	40	.	.	50	50	.	-16	-16	-72	.	.	.	.	2	2	-6	-6
$\chi_1^{(62)}$	1400	1400	.	.	.	40	.	.	50	50	.	-16	-16	-72	.	.	.	.	2	2	-6	-6
$\chi_1^{(63)}$	1400	-1400	.	.	.	.	.	.	-40	40	.	-4	4	.	-2	2	1	-1	-1	1	-9	9
$\chi_1^{(64)}$	1400	-1400	.	.	.	.	.	.	20	-20	.	-4	4	.	-2	2	1	-1	-1	1	15	-15
$\chi_1^{(65)}$	1400	-1400	.	.	.	.	.	.	-40	40	.	-4	4	.	2	-2	-1	1	-1	1	-9	9
$\chi_1^{(66)}$	1400	-1400	.	.	.	.	.	.	20	-20	.	-4	4	.	2	-2	-1	1	-1	1	15	-15
$\chi_1^{(67)}$	1400	1400	.	.	.	40	.	.	65	65	.	-8	-8	-8	.	.	.	.	4	4	4	4
$\chi_1^{(68)}$	1575	1575	.	.	.	15	.	.	-45	-45	1	11	11	-57	3	3	.	.	2	2	-6	-6
$\chi_1^{(69)}$	1575	1575	.	.	.	15	.	.	-45	-45	1	11	11	-57	-3	-3	.	.	2	2	-6	-6
$\chi_1^{(70)}$	1680	1680	-1	-5	-5	-16	1	1	6	6	.	32	32	16	.	.	.	.	-4	-4	-20	-20
$\chi_1^{(71)}$	2016	-2016	.	-4	4	.	1	-1	-36	36	.	16	-16	.	.	.	.	.	-2	2	6	-6
$\chi_1^{(72)}$	2100	2100	.	.	.	20	.	.	-60	-60	.	12	12	52	2	2	-1	-1	3	3	-5	-5
$\chi_1^{(73)}$	2100	2100	.	.	.	20	.	.	-60	-60	.	12	12	52	-2	-2	1	1	3	3	-5	-5
$\chi_1^{(74)}$	2100	2100	.	.	.	20	.	.	30	30	.	-20	-20	116	.	.	.	.	-2	-2	14	14
$\chi_1^{(75)}$	2240	2240	.	.	.	.	.	.	-40	-40	.	.	.	-64	.	.	.	.	.	.	-4	-4
$\chi_1^{(76)}$	2240	2240	.	.	.	.	.	.	-40	-40	.	.	.	-64	.	.	.	.	.	.	-4	-4
$\chi_1^{(77)}$	2268	2268	-1	3	3	-36	.	.	.	.	-12	-12	-36	2	2	-1	-1	-3	-3	9	9	
$\chi_1^{(78)}$	2268	2268	-1	3	3	-36	.	.	.	.	-12	-12	-36	-2	-2	1	1	-3	-3	9	9	
$\chi_1^{(79)}$	2400	-2400	.	.	.	.	.	.	60	-60	.	16	-16	.	.	.	.	.	4	-4	12	-12
$\chi_1^{(80)}$	2400	-2400	.	.	.	.	.	.	60	-60	.	16	-16	.	.	.	.	.	4	-4	12	-12
$\chi_1^{(81)}$	2688	2688	-1	3	3	64	.	.	60	60	.	.	.	128	.	.	.	.	.	.	-16	-16
$\chi_1^{(82)}$	2800	-2800	.	.	.	.	.	.	-80	80	.	-24	24	.	4	-4	1	-1	3	-3	-9	9
$\chi_1^{(83)}$	2800	-2800	.	.	.	.	.	.	-80	80	.	-24	24	.	-4	4	-1	1	3	-3	-9	9
$\chi_1^{(84)}$	2835	2835	.	.	.	-45	.	.	.	.	-1	3	3	-45	-1	-1	-1	-1	3	3	-9	-9
$\chi_1^{(85)}$	2835	2835	.	.	.	-45	.	.	.	.	-1	3	3	-45	1	1	1	1	3	3	-9	-9
$\chi_1^{(86)}$	3150	3150	.	.	.	30	.	.	45	45	2	22	22	-114	.	.	.	.	-2	-2	6	6
$\chi_1^{(87)}$	3200	3200	.	.	.	.	.	.	-40	-40	.	.	.	128	.	.	.	.	.	.	8	8
$\chi_1^{(88)}$	3200	3200	-40	-40	.	.	.	128	8	8
$\chi_1^{(89)}$	3240	-3240	-12	12	.	-2	2	1	-1	-3	3	9	-9	
$\chi_1^{(90)}$	3240	-3240	-12	12	.	2	-2	-1	1	-3	3	9	-9	

[illegible]

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$\chi_1^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_1^{(2)}$	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	-1	-1
$\chi_1^{(3)}$	5	-5	1	-1	-1	1	6	-6	1	-1	-1	1	1	-1	-2	2	-3	3	3	-3
$\chi_1^{(4)}$	5	-5	1	-1	1	-1	-6	6	1	-1	-1	1	-1	1	2	-2	-3	3	-3	3
$\chi_1^{(5)}$	10	10	.	.	.	.	14	14	1	1	1	1	1	1	-2	-2	5	5	2	2
$\chi_1^{(6)}$	10	10	.	.	.	.	-14	-14	1	1	1	1	-1	-1	2	2	5	5	-2	-2
$\chi_1^{(7)}$	14	14	.	.	.	.	-21	-21	-1	-1	-1	-1	1	1	-5	-5	3	3	-6	-6
$\chi_1^{(8)}$	14	14	.	.	.	.	21	21	-1	-1	-1	-1	-1	-1	5	5	3	3	6	6
$\chi_1^{(9)}$	5	5	1	1	1	1	-20	-20	-1	-1	-4	-4	2	2	-4	-4	.	.	-5	-5
$\chi_1^{(10)}$	5	5	1	1	-1	-1	20	20	-1	-1	-4	-4	-2	-2	4	4	.	.	5	5
$\chi_1^{(11)}$	11	-11	.	.	.	.	14	-14	1	-1	2	-2	.	.	6	-6	-6	6	-1	1
$\chi_1^{(12)}$	11	-11	.	.	.	.	-14	14	1	-1	2	-2	.	.	-6	6	-6	6	1	-1
$\chi_1^{(13)}$	10	10	.	.	.	.	.	.	1	1	-2	-2	.	.	.	.	6	6	.	.
$\chi_1^{(14)}$	21	21	.	.	.	.	42	42	.	.	3	3	1	1	10	10	-1	-1	9	9
$\chi_1^{(15)}$	21	21	.	.	.	.	-42	-42	.	.	3	3	-1	-1	-10	-10	-1	-1	-9	-9
$\chi_1^{(16)}$	31	-31	.	.	.	.	56	-56	-1	1	4	-4	-2	2	-8	8	.	.	11	-11
$\chi_1^{(17)}$	31	-31	.	.	.	.	-56	56	-1	1	4	-4	2	-2	8	-8	.	.	-11	11
$\chi_1^{(18)}$	34	-34	-1	1	-1	1	-64	64	-1	1	-2	2	.	.	.	.	-6	6	-4	4
$\chi_1^{(19)}$	34	-34	-1	1	1	-1	64	-64	-1	1	-2	2	.	.	.	.	-6	6	4	-4
$\chi_1^{(20)}$	-12	-12	.	.	.	.	.	.	.	.	6	6	.	.	.	.	-2	-2	.	.
$\chi_1^{(21)}$	-5	-5	.	.	.	.	-35	-35	1	1	13	13	-3	-3	-3	-3	1	1	-5	-5
$\chi_1^{(22)}$	-5	-5	.	.	.	.	35	35	1	1	13	13	3	3	3	3	1	1	5	5
$\chi_1^{(23)}$	39	39	.	.	.	.	-84	-84	.	.	-6	-6	2	2	-4	-4	-2	-2	-9	-9
$\chi_1^{(24)}$	39	39	.	.	.	.	84	84	.	.	-6	-6	-2	-2	4	4	-2	-2	9	9
$\chi_1^{(25)}$	30	30	-1	-1	1	1	-90	-90	.	.	3	3	-1	-1	-10	-10	3	3	.	.
$\chi_1^{(26)}$	30	30	-1	-1	-1	-1	90	90	.	.	3	3	1	1	10	10	3	3	.	.
$\chi_1^{(27)}$	35	35	.	.	.	.	-70	-70	-1	-1	-1	-1	1	1	10	10	7	7	5	5
$\chi_1^{(28)}$	35	35	.	.	.	.	70	70	-1	-1	-1	-1	-1	-1	-10	-10	7	7	-5	-5
$\chi_1^{(29)}$	25	-25	1	-1	-1	1	-120	120	-1	1	4	-4	2	-2	8	-8	.	.	-15	15
$\chi_1^{(30)}$	25	-25	1	-1	1	-1	120	-120	-1	1	4	-4	-2	2	-8	8	.	.	15	-15
$\chi_1^{(31)}$	-30	-30	.	.	.	.	.	.	.	.	-12	-12	.	.	.	.	-4	-4	.	.
$\chi_1^{(32)}$	28	-28	.	.	.	.	.	.	-1	1	-2	2	.	.	.	.	-6	6	.	.
$\chi_1^{(33)}$	16	-16	.	.	.	.	112	-112	-1	1	16	-16	-4	4	-16	16	.	.	4	-4
$\chi_1^{(34)}$	16	-16	.	.	.	.	-112	112	-1	1	16	-16	4	-4	16	-16	.	.	-4	4
$\chi_1^{(35)}$	30	30	.	.	.	.	-105	-105	.	.	12	12	-2	-2	7	7	.	.	.	.
$\chi_1^{(36)}$	30	30	.	.	.	.	105	105	.	.	12	12	2	2	-7	-7	.	.	.	.
$\chi_1^{(37)}$	74	-74	.	.	.	.	-196	196	1	-1	-7	7	-3	3	12	-12	3	-3	-16	16
$\chi_1^{(38)}$	74	-74	.	.	.	.	196	-196	1	-1	-7	7	3	-3	-12	12	3	-3	16	-16
$\chi_1^{(39)}$	81	81	.	.	.	.	189	189	.	.	.	.	.	.	-3	-3	.	.	9	9
$\chi_1^{(40)}$	81	81	.	.	.	.	-189	-189	.	.	.	.	.	.	3	3	.	.	-9	-9
$\chi_1^{(41)}$	55	55	.	.	.	.	-210	-210	1	1	7	7	-3	-3	-18	-18	-1	-1	-15	-15
$\chi_1^{(42)}$	55	55	.	.	.	.	210	210	1	1	7	7	3	3	18	18	-1	-1	15	15
$\chi_1^{(43)}$	-20	-20	.	.	.	.	-70	-70	1	1	-2	-2	-2	-2	10	10	2	2	-10	-10
$\chi_1^{(44)}$	-20	-20	.	.	.	.	70	70	1	1	-2	-2	2	2	-10	-10	2	2	10	10
$\chi_1^{(45)}$	21	-21	.	.	.	.	-126	126	.	.	3	-3	1	-1	10	-10	-3	3	9	-9

	30												40											
$\chi_1^{(46)}$	21	-21	.	.	.	.	126	-126	.	.	3	-3	-1	1	-10	10	-3	3	-9	9	-1	1	-1
$\chi_1^{(47)}$	-24	-24	.	.	.	.	-84	-84	.	.	3	3	1	1	-20	-20	-1	-1	6	6	-2	-2	.
$\chi_1^{(48)}$	-24	-24	.	.	.	.	84	84	.	.	3	3	-1	-1	20	20	-1	-1	-6	-6	2	2	.
$\chi_1^{(49)}$	.	.	-1	-1	1	1	162	162	.	.	.	.	.	.	18	18	.	.	.	.	.	.	.
$\chi_1^{(50)}$	.	.	-1	-1	-1	-1	-162	-162	.	.	.	.	.	.	-18	-18	.	.	.	.	.	.	.
$\chi_1^{(51)}$	90	-90	.	.	.	.	252	-252	.	.	9	-9	-3	3	12	-12	3	-3	.	.	.	.	6
$\chi_1^{(52)}$	90	-90	.	.	.	.	-252	252	.	.	9	-9	3	-3	-12	12	3	-3	.	.	.	.	6
$\chi_1^{(53)}$	15	15	.	.	.	.	-210	-210	.	.	-3	-3	1	1	-2	-2	1	1	-15	-15	1	1	-1
$\chi_1^{(54)}$	15	15	.	.	.	.	210	210	.	.	-3	-3	-1	-1	2	2	1	1	15	15	-1	-1	-1
$\chi_1^{(55)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_1^{(56)}$	81	-81	1	-1	-1	1	216	-216	.	.	.	.	.	.	24	-24	.	.	-9	9	-1	1	3
$\chi_1^{(57)}$	81	-81	1	-1	1	-1	-216	216	.	.	.	.	.	.	-24	24	.	.	9	-9	1	-1	3
$\chi_1^{(58)}$	84	84	.	.	.	.	336	336	.	.	-6	-6	-2	-2	16	16	-2	-2	6	6	-2	-2	4
$\chi_1^{(59)}$	84	84	.	.	.	.	-336	-336	.	.	-6	-6	2	2	-16	-16	-2	-2	-6	-6	2	2	4
$\chi_1^{(60)}$	-60	60	.	.	.	.	.	.	.	.	-6	6	.	.	.	.	6	-6	.	.	.	.	4
$\chi_1^{(61)}$	50	50	.	.	.	.	-280	-280	-1	-1	-4	-4	2	2	8	8	.	.	-10	-10	.	.	-2
$\chi_1^{(62)}$	50	50	.	.	.	.	280	280	-1	-1	-4	-4	-2	-2	-8	-8	.	.	10	10	.	.	-2
$\chi_1^{(63)}$	95	-95	.	.	.	.	350	-350	1	-1	-4	4	2	-2	-10	10	.	.	5	-5	1	-1	-3
$\chi_1^{(64)}$	-25	25	.	.	.	.	-210	210	1	-1	-13	13	-3	3	6	-6	-3	3	-15	15	1	-1	-3
$\chi_1^{(65)}$	95	-95	.	.	.	.	-350	350	1	-1	-4	4	-2	2	10	-10	.	.	-5	5	-1	1	-3
$\chi_1^{(66)}$	-25	25	.	.	.	.	210	-210	1	-1	-13	13	3	-3	-6	6	-3	3	15	-15	-1	1	-3
$\chi_1^{(67)}$	20	20	.	.	.	.	.	.	-1	-1	14	14	.	.	.	.	-2	-2	.	.	.	.	-4
$\chi_1^{(68)}$	90	90	.	.	.	.	-315	-315	.	.	9	9	-3	-3	21	21	-3	-3	.	.	.	.	-6
$\chi_1^{(69)}$	90	90	.	.	.	.	315	315	.	.	9	9	3	3	-21	-21	-3	-3	.	.	.	.	-6
$\chi_1^{(70)}$	60	60	.	.	.	.	.	.	.	.	6	6	.	.	.	.	-2	-2	.	.	.	.	4
$\chi_1^{(71)}$	-90	90	.	.	.	.	.	.	.	.	18	-18	.	.	.	.	6	-6	.	.	.	.	-6
$\chi_1^{(72)}$	75	75	.	.	.	.	-210	-210	.	.	-6	-6	2	2	14	14	-2	-2	15	15	-1	-1	3
$\chi_1^{(73)}$	75	75	.	.	.	.	210	210	.	.	-6	-6	-2	-2	-14	-14	-2	-2	-15	-15	1	1	3
$\chi_1^{(74)}$	30	30	.	.	.	.	.	.	.	.	-6	-6	.	.	.	.	2	2	.	.	.	.	6
$\chi_1^{(75)}$	-4	-4	.	.	.	.	-336	-336	-1	-1	-10	-10	2	2	-16	-16	2	2	-6	-6	-2	-2	4
$\chi_1^{(76)}$	-4	-4	.	.	.	.	336	336	-1	-1	-10	-10	-2	-2	16	16	2	2	6	6	2	2	4
$\chi_1^{(77)}$	81	81	.	.	.	.	378	378	.	.	.	.	.	.	-6	-6	.	.	-9	-9	1	1	-3
$\chi_1^{(78)}$	81	81	.	.	.	.	-378	-378	.	.	.	.	.	.	6	6	.	.	9	9	-1	-1	-3
$\chi_1^{(79)}$	60	-60	-1	1	-1	1	-120	120	.	.	-3	3	-3	3	-24	24	3	-3	.	.	.	.	-4
$\chi_1^{(80)}$	60	-60	-1	1	1	-1	120	-120	.	.	-3	3	3	-3	24	-24	3	-3	.	.	.	.	-4
$\chi_1^{(81)}$	-48	-48	.	.	.	.	.	.	.	.	-12	-12	.	.	.	.	-4	-4	.	.	.	.	.
$\chi_1^{(82)}$	55	-55	.	.	.	.	-280	280	-1	1	-8	8	.	.	-24	24	.	.	5	-5	3	-3	1
$\chi_1^{(83)}$	55	-55	.	.	.	.	280	-280	-1	1	-8	8	.	.	24	-24	.	.	-5	5	-3	3	1
$\chi_1^{(84)}$	-81	-81	.	.	.	.	-189	-189	.	.	.	.	.	.	3	3	.	.	-9	-9	1	1	3
$\chi_1^{(85)}$	-81	-81	.	.	.	.	189	189	.	.	.	.	.	.	-3	-3	.	.	9	9	-1	-1	3
$\chi_1^{(86)}$	-90	-90	.	.	.	.	.	.	.	.	18	18	.	.	.	.	-6	-6	.	.	.	.	6
$\chi_1^{(87)}$	-40	-40	1	1	1	1	-160	-160	-1	-1	14	14	-2	-2	-32	-32	2	2	20	20	.	.	.	
$\chi_1^{(88)}$	-40	-40	1	1	-1	-1	160	160	-1	-1	14	14	2	2	32	32	2	2	-20	-20	.	.	.	
$\chi_1^{(89)}$	81	-81	-1	1	1	-1	-594	594	.	.	.	.	.	.	6	-6	.	.	-9	9	-1	1	3
$\chi_1^{(90)}$	81	-81	-1	1	-1	1	594	-594	.	.	.	.	.	.	-6	6	.	.	9	-9	1	-1	3

	50										60										70									
$\chi_1^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
$\chi_1^{(2)}$	1	1	1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	-1	-1						
$\chi_1^{(3)}$	1	4	-4	-4	4	-1	1	-2	2	1	-1	.	2	-2	.	.	.	2	-2						
$\chi_1^{(4)}$	1	4	-4	4	-4	-1	1	-2	2	-1	1	.	-2	2	.	.	.	2	-2						
$\chi_1^{(5)}$	-2	4	4	6	6	.	.	.	.	-2	-2	-2	2	2	-4	.	-1	1	1	2	-1	1	-1	2	-2	
$\chi_1^{(6)}$	-2	4	4	-6	-6	.	.	.	.	2	2	2	-2	-2	-4	.	-1	1	1	2	-1	1	-1	-2	2	
$\chi_1^{(7)}$	2	11	11	-9	-9	.	.	3	3	-2	-2	-1	-1	-1	3	-1	.	2	2	-3	.	-2	.	3	-1					
$\chi_1^{(8)}$	2	11	11	9	9	.	.	3	3	2	2	1	1	1	3	-1	.	2	2	-3	.	-2	.	-3	1					
$\chi_1^{(9)}$	1	10	10	.	.	-1	-1	2	2	-1	-1	-8	.	.	2	6	3	5	5	-3	3	1	-1	-4	.					
$\chi_1^{(10)}$	1	10	10	.	.	-1	-1	2	2	1	1	8	.	.	2	6	3	5	5	-3	3	1	-1	4	.					
$\chi_1^{(11)}$	-1	-4	4	-4	4	1	-1	2	-2	-3	3	.	2	-2	.	.	.	2	-2	.	.	.	.	.	.
$\chi_1^{(12)}$	-1	-4	4	4	-4	1	-1	2	-2	3	-3	.	-2	2	.	.	.	2	-2	.	.	.	.	.	.
$\chi_1^{(13)}$	2	-10	-10	.	.	-2	-2	-2	-2	.	.	.	.	.	6	-2	.	4	4	3					
$\chi_1^{(14)}$	5	20	20	10	10	1	1	4	4	1	1	10	2	2	4	4	-1	3	3	2	5	1	1	2	2					
$\chi_1^{(15)}$	5	20	20	-10	-10	1	1	4	4	-1	-1	-10	-2	-2	4	4	-1	3	3	2	5	1	1	-2	-2					
$\chi_1^{(16)}$	3	24	-24	-16	16	1	-1	-4	4	1	-1	.	.	.	.	.	.	4	-4	.	.	.	.	.	.
$\chi_1^{(17)}$	3	24	-24	16	-16	1	-1	-4	4	-1	1	.	.	.	.	.	.	4	-4	.	.	.	.	.	.
$\chi_1^{(18)}$	-2	16	-16	16	-16	.	.	.	.	.	.	.	.	.	.	.	.	-2	2	.	.	.	.	.	.
$\chi_1^{(19)}$	-2	16	-16	-16	16	.	.	.	.	.	.	.	.	.	.	.	.	-2	2	.	.	.	.	.	.
$\chi_1^{(20)}$	-4	8	8	.	.	.	.	.	.	.	.	.	.	.	8	8	4	6	6	7	-2	.	2	.	.
$\chi_1^{(21)}$	3	15	15	5	5	-1	-1	-1	-1	3	3	5	5	5	-1	-1	-2	4	4	-5	-2	.	2	-3	-3					
$\chi_1^{(22)}$	3	15	15	-5	-5	-1	-1	-1	-1	-3	-3	-5	-5	-5	-1	-1	-2	4	4	-5	-2	.	2	3	3					
$\chi_1^{(23)}$	-1	26	26	-16	-16	-1	-1	2	2	-1	-1	8	.	.	2	-2	1	3	3	1	-5	1	-1	-4	.					
$\chi_1^{(24)}$	-1	26	26	16	16	-1	-1	2	2	1	1	-8	.	.	2	-2	1	3	3	1	-5	1	-1	4	.					
$\chi_1^{(25)}$	2	20	20	-10	-10	.	.	.	.	-4	-4	-2	2	2	12	.	.	-6	-6	6	.	2	.	-6	-2	
$\chi_1^{(26)}$	2	20	20	10	10	.	.	.	.	4	4	2	-2	-2	12	.	.	-6	-6	6	.	2	.	6	2	
$\chi_1^{(27)}$	-1	-10	-10	-10	-10	1	1	-2	-2	1	1	-2	-2	-2	-2	2	1	-1	-1	-5	1	-1	1	2	-2					
$\chi_1^{(28)}$	-1	-10	-10	10	10	1	1	-2	-2	-1	-1	2	2	2	-2	2	1	-1	-1	-5	1	-1	1	-2	2					
$\chi_1^{(29)}$	1	40	-40	.	.	1	-1	-4	4	-1	1	.	.	.	.	.	.	10	-10	.	.	.	.	.	.
$\chi_1^{(30)}$	1	40	-40	.	.	1	-1	-4	4	1	-1	.	.	.	.	.	.	10	-10	.	.	.	.	.	.
$\chi_1^{(31)}$	2	20	20	.	.	2	2	-4	-4	.	.	.	.	.	4	-4	-4	6	6	8	2	.	-2	.	.
$\chi_1^{(32)}$	4	-32	32	.	.	.	.	.	.	.	.	.	.	.	.	.	.	4	-4	.	.	.	.	.	.
$\chi_1^{(33)}$	8	32	-32	.	.	.	.	.	.	-4	4	.	.	.	.	.	.	-2	2	.	.	.	.	.	.
$\chi_1^{(34)}$	8	32	-32	.	.	.	.	.	.	4	-4	.	.	.	.	.	.	-2	2	.	.	.	.	.	.
$\chi_1^{(35)}$	2	5	5	-5	-5	.	.	-3	-3	4	4	-13	3	3	-19	1	3	3	3	6	3	-1	-1	-1	3					
$\chi_1^{(36)}$	2	5	5	5	5	.	.	-3	-3	-4	-4	13	-3	-3	-19	1	3	3	3	6	3	-1	-1	1	-3					
$\chi_1^{(37)}$	2	56	-56	24	-24	-2	2	-4	4	.	.	.	-4	4	.	.	.	2	-2	.	.	.	.	.	.
$\chi_1^{(38)}$	2	56	-56	-24	24	-2	2	-4	4	.	.	.	4	-4	.	.	.	2	-2	.	.	.	.	.	.
$\chi_1^{(39)}$	-3	39	39	29	29	-1	-1	-1	-1	-3	-3	-3	-3	-3	-9	-1	.	.	.	.	.	.	.	-3	-3
$\chi_1^{(40)}$	-3	39	39	-29	-29	-1	-1	-1	-1	3	3	3	3	3	-9	-1	.	.	.	.	.	.	.	3	3
$\chi_1^{(41)}$	3	60	60	-10	-10	1	1	4	4	-3	-3	6	-2	-2	12	-4	2	4	4	2	-4	-2	.	6	-2					
$\chi_1^{(42)}$	3	60	60	10	10	1	1	4	4	3	3	-6	2	2	12	-4	2	4	4	2	-4	-2	.	-6	2					
$\chi_1^{(43)}$	-4	20	20	10	10	-2	-2	-14	6	6	-4	8	-1	7	7	-4	-1	-1	-1	-2	2					
$\chi_1^{(44)}$	-4	20	20	-10	-10	2	2	14	-6	-6	-4	8	-1	7	7	-4	-1	-1	-1	2	-2					
$\chi_1^{(45)}$	1	4	-4	4	-4	-1	1	-2	2	-5	5	.	-2	2	.	.	.	-6	6					

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$\chi_1^{(91)}$	-2	16	-16	-16	16	2	-2	-6	6
$\chi_1^{(92)}$	-2	16	-16	16	-16	-2	2	-6	6
$\chi_1^{(93)}$	-8	-8
$\chi_1^{(94)}$	-8	-8
$\chi_1^{(95)}$	-8	8
$\chi_1^{(96)}$	-8	8
$\chi_1^{(97)}$	-2	40	40	20	20	-4	-4	4	4	4	8	-8	3	-3	-3	-6	3	1	-1	-4	4	4
$\chi_1^{(98)}$	-2	40	40	-20	-20	.	.	.	.	4	4	-4	-4	-4	8	-8	3	-3	-3	-6	3	1	-1	4	-4	-4
$\chi_1^{(99)}$	-7	20	-20	-20	20	-1	1	-2	2	-5	5	.	2	-2	.	.	.	6	-6	.	.	.	.	.	.	.
$\chi_1^{(100)}$	-7	20	-20	20	-20	-1	1	-2	2	5	-5	.	-2	2	.	.	.	6	-6	.	.	.	.	.	.	.
$\chi_1^{(101)}$	-8	40	40	.	.	.	.	.	.	.	.	.	.	.	8	-8	2	6	6	-1	2	2	2	.	.	.
$\chi_1^{(102)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-2	4	4	4	4	-2	.	.	.	.
$\chi_1^{(103)}$	3	60	-60	20	-20	1	-1	2	-2	-3	3	.	6	-6	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_1^{(104)}$	3	60	-60	-20	20	1	-1	2	-2	3	-3	.	-6	6	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_1^{(105)}$	.	-72	-72	.	.	.	.	.	.	.	.	.	.	.	24	8	.	.	.	9	.	.	.	.	.	.
$\chi_1^{(106)}$	-2	-80	80	.	.	2	-2	-8	8	.	.	.	.	.	.	.	.	-4	4	.	.	.	.	.	.	.
$\chi_1^{(107)}$	4	-80	80	.	.	.	.	.	.	-4	4	.	8	-8	.	.	.	2	-2	.	.	.	.	.	.	.
$\chi_1^{(108)}$	4	-80	80	.	.	.	.	.	.	4	-4	.	-8	8	.	.	.	2	-2	.	.	.	.	.	.	.
$\chi_1^{(109)}$	.	-90	-90	.	.	.	.	6	6	.	.	.	.	.	6	6	.	.	.	-9	.	.	.	.	.	.
$\chi_1^{(110)}$	.	-45	-45	15	15	.	.	3	3	.	.	-9	-9	-9	-21	-1	.	.	.	.	.	.	.	3	-1	-1
$\chi_1^{(111)}$	.	-45	-45	-15	-15	.	.	3	3	.	.	9	9	9	-21	-1	.	.	.	.	.	.	.	-3	1	1
$\chi_1^{(112)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-8	8	.	.	.	.	.	.	.

	80															90									
$\chi_1^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
$\chi_1^{(2)}$	-1	-1	-1	-1	-1	1	1	-1	-1	1	1	-1	1	1	1	1	-1	-1	1	1	1	1	1	1	
$\chi_1^{(3)}$	3	-3	-1	1	.	2	-2	.	.	-2	2	.	.	.	-3	3	1	-1	1	-1	.	.	-2	2	
$\chi_1^{(4)}$	-3	3	1	-1	.	2	-2	.	.	-2	2	.	.	.	-3	3	-1	1	1	-1	.	.	-2	2	
$\chi_1^{(5)}$	5	5	-1	-1	-1	1	1	1	.	2	2	.	.	-2	3	3	1	1	-1	-1	.	.	2	2	
$\chi_1^{(6)}$	-5	-5	1	1	1	1	1	-1	.	2	2	.	.	-2	3	3	-1	-1	-1	-1	.	.	2	2	
$\chi_1^{(7)}$	-3	-3	-1	-1	.	2	2	2	1	1	1	1	-1	1	5	5	1	1	1	1	-1	-1	1	1	
$\chi_1^{(8)}$	3	3	1	1	.	2	2	-2	-1	1	1	-1	-1	1	5	5	-1	-1	1	1	-1	-1	1	1	
$\chi_1^{(9)}$	-2	-2	.	.	-1	1	1	1	-2	.	.	.	2	1	.	.	.	.	.	.	.	.	1	1
$\chi_1^{(10)}$	2	2	.	.	1	1	1	-1	2	.	.	.	2	1	.	.	.	.	.	.	.	.	1	1
$\chi_1^{(11)}$	4	-4	2	-2	.	-2	2	.	.	-2	2	.	.	.	-1	1	1	-1	-1	1	1	-1	.	.	
$\chi_1^{(12)}$	-4	4	-2	2	.	-2	2	.	.	-2	2	.	.	.	-1	1	-1	1	-1	1	1	-1	.	.	
$\chi_1^{(13)}$	.	.	.	.	.	-4	-4	.	.	2	2	.	-2	3	.	.	.	.	.	.	.	.	-1	-1
$\chi_1^{(14)}$	-3	-3	-1	-1	-1	-1	-1	1	2	.	.	.	.	-2	4	4	.	.	.	.	1	1	-2	-2
$\chi_1^{(15)}$	3	3	1	1	1	-1	-1	-1	-2	.	.	.	.	-2	4	4	.	.	.	.	1	1	-2	-2
$\chi_1^{(16)}$	-2	2	.	.	.	.	.	.	.	.	.	.	.	.	-7	7	-1	1	1	-1	1	-1	2	-2
$\chi_1^{(17)}$	2	-2	.	.	.	.	.	.	.	.	.	.	.	.	-7	7	1	-1	1	-1	1	-1	2	-2
$\chi_1^{(18)}$	-8	8	.	.	.	2	-2	.	.	.	.	.	.	.	-5	5	1	-1	-1	1	-1	1	-2	2
$\chi_1^{(19)}$	8	-8	.	.	.	2	-2	.	.	.	.	.	.	.	-5	5	-1	1	-1	1	-1	1	-2	2
$\chi_1^{(20)}$	.	.	.	.	.	2	2	.	.	.	.	.	.	3	-2	-2	.	.	-2	-2	-2	-2	-1	-1
$\chi_1^{(21)}$	1	1	-1	-1	.	.	.	2	1	-1	-1	-1	3	3	.	.	.	.	.	.	.	.	-1	-1
$\chi_1^{(22)}$	-1	-1	1	1	.	.	.	-2	-1	-1	-1	1	3	3	.	.	.	.	.	.	.	.	-1	-1
$\chi_1^{(23)}$	6	6	.	.	-1	-1	-1	-1	2	.	.	.	2	1	5	5	-1	-1	1	1	-1	-1	-3	-3	
$\chi_1^{(24)}$	-6	-6	.	.	1	-1	-1	1	-2	.	.	.	2	1	5	5	1	1	1	1	-1	-1	-3	-3	
$\chi_1^{(25)}$	-9	-9	-1	-1	.	2	2	-2	.	-2	-2	.	.	2	.	.	.	.	.	.	.	.	2	2
$\chi_1^{(26)}$	9	9	1	1	.	2	2	2	.	-2	-2	.	.	2	.	.	.	.	.	.	.	.	2	2
$\chi_1^{(27)}$	-7	-7	1	1	-1	-1	-1	1	.	.	.	.	2	-1	.	.	.	.	.	.	.	.	-1	-1
$\chi_1^{(28)}$	7	7	-1	-1	1	-1	-1	-1	.	.	.	.	2	-1	.	.	.	.	.	.	.	.	-1	-1
$\chi_1^{(29)}$	-6	6	.	.	.	2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-2	2
$\chi_1^{(30)}$	6	-6	.	.	.	2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-2	2
$\chi_1^{(31)}$	.	.	.	.	.	2	2	.	.	.	.	.	4	.	.	.	.	.	.	.	.	.	.	.
$\chi_1^{(32)}$	.	.	.	.	.	-4	4	.	.	.	.	.	.	.	2	-2	.	.	2	-2	-2	2	2	-2
$\chi_1^{(33)}$	-4	4	.	.	.	-2	2	.	.	.	.	.	.	.	2	-2	.	.	-2	2	1	-1	.	.
$\chi_1^{(34)}$	4	-4	.	.	.	-2	2	.	.	.	.	.	.	.	2	-2	.	.	-2	2	1	-1	.	.
$\chi_1^{(35)}$	-6	-6	.	.	-1	-1	-1	-1	1	-1	-1	1	1	2	.	.	.	.	.	.	.	.	2	2
$\chi_1^{(36)}$	6	6	.	.	1	-1	-1	1	-1	-1	-1	-1	1	2	.	.	.	.	.	.	.	.	2	2
$\chi_1^{(37)}$	7	-7	-1	1	.	-2	2	.	.	.	.	.	.	.	-5	5	-1	1	-1	1	-1	1	2	-2
$\chi_1^{(38)}$	-7	7	1	-1	.	-2	2	.	.	.	.	.	.	.	-5	5	1	-1	-1	1	-1	1	2	-2
$\chi_1^{(39)}$	.	.	.	.	.	.	.	.	1	-1	-1	1	-1	.	7	7	-1	-1	-1	-1	1	1	.	.
$\chi_1^{(40)}$	.	.	.	.	.	.	.	.	-1	-1	-1	-1	-1	.	7	7	1	1	-1	-1	1	1	.	.
$\chi_1^{(41)}$	-3	-3	1	1	.	.	.	.	2	.	.	.	.	-2	.	.	.	.	.	.	.	.	2	2
$\chi_1^{(42)}$	3	3	-1	-1	-2	-2	2	2	
$\chi_1^{(43)}$	2	2	.	.	1	-1	-1	1	.	-2	-2	.	.	-4	
$\chi_1^{(44)}$	-2	-2	.	.	-1	-1	-1	-1	.	-2	-2	.	.	-4	
$\chi_1^{(45)}$	-9	9	1	-1	.	2	-2	.	.	2	-2	.	.	.	5	-5	-1	1	1	-1	1	-1	2	-2	

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$\chi_1^{(46)}$	9	-9	-1	1	.	2	-2	.	.	2	-2	.	.	.	5	-5	1	-1	1	-1	1	-1	2	-2
$\chi_1^{(47)}$	-3	-3	-1	-1	1	3	3	1	2	-5	-5	-1	-1	-1	-1	1	1	-2	-2
$\chi_1^{(48)}$	3	3	1	1	-1	3	3	-1	2	-5	-5	1	1	-1	-1	1	1	-2	-2
$\chi_1^{(49)}$	.	.	.	.	.	.	.	.	.	2	2	.	.	.	-3	-3	-1	-1	1	1	.	.	.	.
$\chi_1^{(50)}$	.	.	.	.	.	.	.	.	.	2	2	.	.	.	-3	-3	1	1	1	1	.	.	.	.
$\chi_1^{(51)}$	-9	9	-1	1	.	.	.	.	.	.	.	.	.	.	-3	3	1	-1	1	-1	.	.	2	-2
$\chi_1^{(52)}$	9	-9	1	-1	.	.	.	.	.	.	.	.	.	.	-3	3	-1	1	1	-1	.	.	2	-2
$\chi_1^{(53)}$	-3	-3	-1	-1	.	2	2	-2	.	.	.	.	-2	3	.	.	.	.	.	.	.	.	-1	-1
$\chi_1^{(54)}$	3	3	1	1	.	2	2	2	.	.	.	.	-2	3	.	.	.	.	.	.	.	.	-1	-1
$\chi_1^{(55)}$	.	.	.	.	.	.	.	.	.	-2	-2	.	-2	-3	-6	-6	.	.	2	2	.	.	-3	-3
$\chi_1^{(56)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	1	-1	1	-1	1	1	-1	.	.
$\chi_1^{(57)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	1	1	-1	-1	1	1	-1	.	.
$\chi_1^{(58)}$	-6	-6	.	.	.	-2	-2	-2	.	.	.	.	.	.	-1	-1	1	1	-1	-1	-1	-1	.	.
$\chi_1^{(59)}$	6	6	.	.	.	-2	-2	2	.	.	.	.	.	.	-1	-1	-1	-1	-1	-1	-1	-1	.	.
$\chi_1^{(60)}$	.	.	.	.	.	4	-4	.	.	.	.	.	.	.	6	-6	.	.	-2	2	.	.	2	-2
$\chi_1^{(61)}$	-10	-10	.	.	1	1	1	1	.	.	.	.	.	-2	.	.	.	.	.	.	.	.	2	2
$\chi_1^{(62)}$	10	10	.	.	-1	1	1	-1	.	.	.	.	.	-2	.	.	.	.	.	.	.	.	2	2
$\chi_1^{(63)}$	10	-10	.	.	.	.	.	.	.	2	-2	.	.	.	.	.	.	.	.	.	.	.	-4	4
$\chi_1^{(64)}$	3	-3	1	-1	.	.	.	.	.	2	-2	.	.	.	.	.	.	.	.	.	.	.	2	-2
$\chi_1^{(65)}$	-10	10	.	.	.	.	.	.	.	2	-2	.	.	.	.	.	.	.	.	.	.	.	-4	4
$\chi_1^{(66)}$	-3	3	-1	1	.	.	.	.	.	2	-2	.	.	.	.	.	.	.	.	.	.	.	2	-2
$\chi_1^{(67)}$	.	.	.	.	.	-4	-4	.	.	.	.	.	.	1	.	.	.	.	.	.	.	.	1	1
$\chi_1^{(68)}$	9	9	-1	-1	.	.	.	.	-1	1	1	1	-1	3	.	.	.	.	.	.	.	.	-1	-1
$\chi_1^{(69)}$	-9	-9	1	1	.	.	.	.	1	1	1	-1	-1	3	.	.	.	.	.	.	.	.	-1	-1
$\chi_1^{(70)}$	.	.	.	.	.	-2	-2	.	.	.	.	.	.	2	.	.	.	.	.	.	.	.	2	2
$\chi_1^{(71)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-6	6	.	.	2	-2	.	.	-2	2
$\chi_1^{(72)}$	6	6	.	.	1	3	3	-1	2	.	.	.	.	-4	.	.	.	.	.	.	.	.	.	.
$\chi_1^{(73)}$	-6	-6	.	.	-1	3	3	1	-2	.	.	.	.	-4	.	.	.	.	.	.	.	.	.	.
$\chi_1^{(74)}$	.	.	.	.	.	.	.	.	.	.	.	.	-4	2	.	.	.	.	.	.	.	.	-2	-2
$\chi_1^{(75)}$	6	6	.	.	.	-2	-2	-2	.	.	.	.	.	.	-5	-5	1	1	-1	-1	1	1	.	.
$\chi_1^{(76)}$	-6	-6	.	.	.	-2	-2	2	.	.	.	.	.	.	-5	-5	-1	-1	-1	-1	1	1	.	.
$\chi_1^{(77)}$	.	.	.	.	.	.	.	.	2	.	.	.	.	.	-2	-2	.	.	2	2	1	1	.	.
$\chi_1^{(78)}$	.	.	.	.	.	.	.	.	-2	.	.	.	.	.	-2	-2	.	.	2	2	1	1	.	.
$\chi_1^{(79)}$	3	-3	1	-1	.	2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-2	2
$\chi_1^{(80)}$	-3	3	-1	1	.	2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-2	2
$\chi_1^{(81)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	4	8	8	.	.	.	.	2	2	.	.
$\chi_1^{(82)}$	-8	8	.	.	.	-2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_1^{(83)}$	8	-8	.	.	.	-2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_1^{(84)}$	.	.	.	.	.	.	.	.	-1	-1	-1	1	-1	.	5	5	-1	-1	1	1	-1	-1	.	.
$\chi_1^{(85)}$	1	-1	-1	-1	-1	.	5	5	1	1	1	1	-1	-1	.	.
$\chi_1^{(86)}$	2	2	.	-2	-3	1	1
$\chi_1^{(87)}$	2	2
$\chi_1^{(88)}$	-2	-2
$\chi_1^{(89)}$	-2	2	5	-5	1	-1	1	-1	1	-1	.	.
$\chi_1^{(90)}$	-2	2	5	-5	-1	1	1	-1	1	-1	.	.

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$\chi_1^{(91)}$	-6	6	.	.	.	2	-2	-5	5	-1	1	-1	1	-1	1	2	-2	.	.
$\chi_1^{(92)}$	6	-6	.	.	.	2	-2	-5	5	1	-1	-1	1	-1	1	2	-2	.	.
$\chi_1^{(93)}$	8	8	-4	-4	-1	-1
$\chi_1^{(94)}$	-8	-8	-4	-4	-1	-1
$\chi_1^{(95)}$	-8	8	4	-4	-1	1
$\chi_1^{(96)}$	8	-8	.	.	.	.	.	.	.	.	.	.	4	-4	.	.	.	.	-1	1	.	.	.	.
$\chi_1^{(97)}$	3	3	1	1	-1	1	1	1	.	.	.	.	-2	.	.	.	.	.	.	.	-2	-2	.	.
$\chi_1^{(98)}$	-3	-3	-1	-1	1	1	1	-1	.	.	.	.	-2	.	.	.	.	.	.	.	-2	-2	.	.
$\chi_1^{(99)}$	3	-3	-1	1	.	-2	2	.	.	2	-2	.	.	.	.	.	.	.	.	.	-2	2	.	.
$\chi_1^{(100)}$	-3	3	1	-1	.	-2	2	.	.	2	-2	.	.	.	.	.	.	.	.	.	-2	2	.	.
$\chi_1^{(101)}$	.	.	.	.	.	-2	-2	.	.	.	.	.	-1	.	.	.	.	.	.	.	3	3	.	.
$\chi_1^{(102)}$	.	.	.	.	.	.	.	.	.	.	.	.	4	.	.	.	.	.	.	.	.	.	.	.
$\chi_1^{(103)}$	.	.	.	.	.	.	.	.	.	-2	2	.	.	4	-4	.	.	.	.	-1	1	.	.	.
$\chi_1^{(104)}$	.	.	.	.	.	.	.	.	.	-2	2	.	.	4	-4	.	.	.	.	-1	1	.	.	.
$\chi_1^{(105)}$	.	.	.	.	.	.	.	.	.	.	.	.	-3	6	6	.	.	-2	-2	.	.	-3	-3	.
$\chi_1^{(106)}$	.	.	.	.	.	-4	4	.	.	.	.	.	.	.	.	.	.	.	.	.	-2	2	.	.
$\chi_1^{(107)}$	1	-1	-1	1	.	2	-2	2	-2	.	.
$\chi_1^{(108)}$	-1	1	1	-1	.	2	-2	2	-2	.	.
$\chi_1^{(109)}$	-2	-2	.	-2	3	3	3	.	.
$\chi_1^{(110)}$	1	1	1	-1	3
$\chi_1^{(111)}$	-1	1	1	1	3
$\chi_1^{(112)}$	-8	8	2	-2	.	.	.

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$\chi_1^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_1^{(2)}$	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1
$\chi_1^{(3)}$.	.	-2	2	.	.	1	-1	2	-2	-3	3	.	.	-2	2	1	-1
$\chi_1^{(4)}$.	.	-2	2	.	.	-1	1	-2	2	3	-3	.	.	2	-2	1	-1
$\chi_1^{(5)}$	.	.	1	1	-1	-1	-1	-1	2	2	4	4	-1	-1	1	1	-1	-1
$\chi_1^{(6)}$	.	.	1	1	1	1	1	1	-2	-2	-4	-4	1	1	-1	-1	-1	-1
$\chi_1^{(7)}$	-1	-1	2	2	.	.	-1	-1	-1	-1	-4	-4	.	.	-2	-2	1	1
$\chi_1^{(8)}$	-1	-1	2	2	.	.	1	1	1	1	4	4	.	.	2	2	1	1
$\chi_1^{(9)}$	-1	2	-1	-1	1	1	.	.	.	.	1	1	1	1	-1	-1	-2	-2
$\chi_1^{(10)}$	-1	2	-1	-1	-1	-1	.	.	.	.	-1	-1	-1	-1	1	1	-2	-2
$\chi_1^{(11)}$	.	.	1	-1	-1	1	-1	1	1	-1	-3	3	2	-2	.	.	.	.
$\chi_1^{(12)}$	.	.	1	-1	1	-1	1	-1	-1	1	3	-3	-2	2	.	.	.	.
$\chi_1^{(13)}$	-1	2	-2	-2	.	.	.	.	.	.	.	.	.	.	.	.	2	2
$\chi_1^{(14)}$	.	.	.	.	.	.	2	2	-1	-1	1	1	3	3	1	1	1	1
$\chi_1^{(15)}$	.	.	.	.	.	.	-2	-2	1	1	-1	-1	-3	-3	-1	-1	1	1
$\chi_1^{(16)}$	.	.	-1	1	-1	1	1	-1	-1	1	-3	3	2	-2	-2	2	2	-2
$\chi_1^{(17)}$	.	.	-1	1	1	-1	-1	1	1	-1	3	-3	-2	2	2	-2	2	-2
$\chi_1^{(18)}$	.	.	-1	1	-1	1	1	-1	-1	1	6	-6	2	-2	.	.	-2	2
$\chi_1^{(19)}$	.	.	-1	1	1	-1	-1	1	1	-1	-6	6	-2	2	.	.	-2	2
$\chi_1^{(20)}$	1	4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2	2
$\chi_1^{(21)}$	-1	-1	1	1	1	1	.	.	.	.	-1	-1	-2	-2	.	.	-1	-1
$\chi_1^{(22)}$	-1	-1	1	1	-1	-1	.	.	.	.	1	1	2	2	.	.	-1	-1
$\chi_1^{(23)}$	1	-2	.	.	.	.	1	1	1	1	-1	-1	3	3	-1	-1	.	.
$\chi_1^{(24)}$	1	-2	.	.	.	.	-1	-1	-1	-1	1	1	-3	-3	1	1	.	.
$\chi_1^{(25)}$	.	.	.	.	.	.	.	.	.	.	-2	-2	.	.	2	2	-1	-1
$\chi_1^{(26)}$	.	.	.	.	.	.	.	.	.	.	2	2	.	.	-2	-2	-1	-1
$\chi_1^{(27)}$	1	-2	-1	-1	-1	-1	.	.	.	.	-5	-5	-1	-1	1	1	-1	-1
$\chi_1^{(28)}$	1	-2	-1	-1	1	1	.	.	.	.	5	5	1	1	-1	-1	-1	-1
$\chi_1^{(29)}$	.	.	2	-2	.	.	.	.	.	.	-3	3	.	.	2	-2	-2	2
$\chi_1^{(30)}$	.	.	2	-2	.	.	.	.	.	.	3	-3	.	.	-2	2	-2	2
$\chi_1^{(31)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_1^{(32)}$	.	.	2	-2	.	.	.	.	.	.	.	.	.	.	.	.	2	-2
$\chi_1^{(33)}$	.	.	-1	1	1	-1	2	-2	1	-1	.	.	4	-4	2	-2	.	.
$\chi_1^{(34)}$	.	.	-1	1	-1	1	-2	2	-1	1	.	.	-4	4	-2	2	.	.
$\chi_1^{(35)}$	.	-3	.	.	.	.	.	.	.	.	2	2	-3	-3	1	1	2	2
$\chi_1^{(36)}$	.	-3	.	.	.	.	.	.	.	.	-2	-2	3	3	-1	-1	2	2
$\chi_1^{(37)}$	.	.	1	-1	-1	1	-1	1	1	-1	.	.	2	-2	.	.	-1	1
$\chi_1^{(38)}$	.	.	1	-1	1	-1	1	-1	-1	1	.	.	-2	2	.	.	-1	1
$\chi_1^{(39)}$	.	3	.	.	.	.	-1	-1	-1	-1	3	3	.	.	.	.	.	.
$\chi_1^{(40)}$	.	3	.	.	.	.	1	1	1	1	-3	-3	.	.	.	.	.	.
$\chi_1^{(41)}$.	.	-2	-2	3	3	-1	-1
$\chi_1^{(42)}$.	.	-2	-2	-3	-3	-1	-1
$\chi_1^{(43)}$.	.	1	1	-1	-1	-2	-2	5	5	1	1	.	.
$\chi_1^{(44)}$.	.	1	1	1	1	2	2	-5	-5	-1	-1	.	.
$\chi_1^{(45)}$	-1	1	1	-1	3	-3	.	.	-2	2	-1	1

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$\chi_1^{(46)}$	1	-1	-1	1	-3	3	.	.	2	-2	-1	1
$\chi_1^{(47)}$	1	1	1	1	-2	-2	-3	-3	1	1	1	1
$\chi_1^{(48)}$	-1	-1	-1	-1	2	2	3	3	-1	-1	1	1
$\chi_1^{(49)}$	-3	-3
$\chi_1^{(50)}$	3	3
$\chi_1^{(51)}$	-3	3	-1	1
$\chi_1^{(52)}$	3	-3	.	.	.	.	.	.	.	.	-1	1
$\chi_1^{(53)}$	1	-2	.	.	.	.	.	.	.	.	1	1	.	.	-2	-2	-1	-1
$\chi_1^{(54)}$	1	-2	.	.	.	.	.	.	.	.	-1	-1	.	.	2	2	-1	-1
$\chi_1^{(55)}$	-1	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_1^{(56)}$	1	-1	-1	1	-3	3	.	.	.	.	.	.
$\chi_1^{(57)}$	-1	1	1	-1	3	-3	.	.	.	.	.	.
$\chi_1^{(58)}$	1	1	1	1	-2	-2	.	.	-2	-2	.	.
$\chi_1^{(59)}$	-1	-1	-1	-1	2	2	.	.	2	2	.	.
$\chi_1^{(60)}$	2	-2
$\chi_1^{(61)}$.	.	-1	-1	-1	-1	.	.	.	.	4	4	-1	-1	-1	-1	2	2
$\chi_1^{(62)}$.	.	-1	-1	1	1	.	.	.	.	-4	-4	1	1	1	1	2	2
$\chi_1^{(63)}$.	.	1	-1	-1	1	.	.	.	.	3	-3	2	-2	2	-2	2	-2
$\chi_1^{(64)}$.	.	-2	2	.	.	.	.	.	.	3	-3	.	.	.	.	-1	1
$\chi_1^{(65)}$.	.	1	-1	1	-1	.	.	.	.	-3	3	-2	2	-2	2	2	-2
$\chi_1^{(66)}$.	.	-2	2	.	.	.	.	.	.	-3	3	.	.	.	.	-1	1
$\chi_1^{(67)}$	1	4	2	2	.	.	.	.	.	.	.	.	.	.	.	.	-2	-2
$\chi_1^{(68)}$	-1	-1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	-1
$\chi_1^{(69)}$	-1	-1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	-1
$\chi_1^{(70)}$	2	2
$\chi_1^{(71)}$	-2	2
$\chi_1^{(72)}$	-1	-1	-3	-3	-1	-1	.	.
$\chi_1^{(73)}$	1	1	3	3	1	1	.	.
$\chi_1^{(74)}$	-2	-2
$\chi_1^{(75)}$.	.	2	2	.	.	-1	-1	-1	-1	-2	-2	.	.	2	2	.	.
$\chi_1^{(76)}$.	.	2	2	.	.	1	1	1	1	2	2	.	.	-2	-2	.	.
$\chi_1^{(77)}$	-2	-2	1	1	-3	-3	.	.	.	.	.	.
$\chi_1^{(78)}$	2	2	-1	-1	3	3	.	.	.	.	.	.
$\chi_1^{(79)}$	-6	6	.	.	1	-1
$\chi_1^{(80)}$	6	-6	.	.	1	-1
$\chi_1^{(81)}$
$\chi_1^{(82)}$.	.	-1	1	-1	1	.	.	.	.	-3	3	2	-2	.	.	.	.
$\chi_1^{(83)}$.	.	-1	1	1	-1	.	.	.	.	3	-3	-2	2	.	.	.	.
$\chi_1^{(84)}$.	3	.	.	.	.	1	1	1	1	-3	-3	.	.	.	.	.	.
$\chi_1^{(85)}$.	3	-1	-1	-1	-1	3	3
$\chi_1^{(86)}$	1	-2	-2	-2
$\chi_1^{(87)}$.	.	-1	-1	-1	-1	2	2	-2	-2	.	.
$\chi_1^{(88)}$.	.	-1	-1	1	1	-2	-2	2	2	.	.
$\chi_1^{(89)}$	1	-1	-1	1	-3	3
$\chi_1^{(90)}$	-1	1	1	-1	3	-3

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$\chi_1^{(91)}$	-1	1	1	-1	2	-2	2	-2
$\chi_1^{(92)}$	1	-1	-1	1	-2	2	2	-2
$\chi_1^{(93)}$.	.	1	1	-1	-1	2	2	-1	-1	.	.	-4	-4
$\chi_1^{(94)}$.	.	1	1	1	1	-2	-2	1	1	.	.	4	4
$\chi_1^{(95)}$.	.	-1	1	-1	1	2	-2	1	-1	.	.	-4	4
$\chi_1^{(96)}$.	.	-1	1	1	-1	-2	2	-1	1	.	.	4	-4	.	.	.	.
$\chi_1^{(97)}$	-2	-2	-3	-3	-1	-1	1	1
$\chi_1^{(98)}$	2	2	3	3	1	1	1	1
$\chi_1^{(99)}$	3	-3	.	.	-2	2	1	-1
$\chi_1^{(100)}$	-3	3	.	.	2	-2	1	-1
$\chi_1^{(101)}$	-1	-4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_1^{(102)}$.	.	-2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_1^{(103)}$	-2	2	-1	1	-3	3	.	.	.	.	.	.
$\chi_1^{(104)}$	2	-2	1	-1	3	-3	.	.	.	.	.	.
$\chi_1^{(105)}$	-1	-4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_1^{(106)}$.	.	-2	2	.	.	.	.	.	.	.	.	.	.	.	.	-2	2
$\chi_1^{(107)}$.	.	1	-1	-1	1	.	.	.	.	.	.	-4	4	2	-2	-1	1
$\chi_1^{(108)}$.	.	1	-1	1	-1	.	.	.	.	.	.	4	-4	-2	2	-1	1
$\chi_1^{(109)}$	1	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_1^{(110)}$.	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_1^{(111)}$.	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_1^{(112)}$.	.	2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.

The generators of G^{s_2} are:

$$\begin{pmatrix} 1 & 1 & 1 & -2 & 0 & 0 & 1 & 0 \\ 1 & 1 & 1 & -2 & 0 & -1 & 2 & 0 \\ 2 & 1 & 2 & -3 & 0 & -1 & 2 & 0 \\ 2 & 2 & 3 & -4 & -1 & -1 & 3 & 0 \\ 1 & 1 & 3 & -3 & -1 & -1 & 3 & 0 \\ 1 & 1 & 2 & -2 & -1 & -1 & 2 & 1 \\ 1 & 0 & 1 & -1 & -1 & 0 & 1 & 1 \\ 1 & 0 & 0 & 0 & -1 & 0 & 1 & 0 \end{pmatrix}.$$

The representatives of conjugacy classes of G^{s_2} are:

$$\begin{pmatrix} 0 & 0 & 1 & -2 & 2 & 0 & -1 & 1 \\ -1 & 0 & 1 & -2 & 2 & 1 & -2 & 2 \\ -1 & 0 & 2 & -3 & 3 & 1 & -3 & 2 \\ -1 & 0 & 2 & -4 & 4 & 2 & -5 & 4 \\ -1 & -1 & 2 & -3 & 3 & 2 & -4 & 3 \\ 0 & -1 & 1 & -2 & 2 & 2 & -3 & 2 \\ 0 & -1 & 1 & -1 & 1 & 1 & -2 & 2 \\ 0 & 0 & 1 & -1 & 0 & 1 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 1 & 0 & -2 & 1 & 1 & 0 \\ -1 & 1 & 2 & 0 & -3 & 1 & 1 & 0 \\ -1 & 1 & 3 & -1 & -3 & 1 & 2 & 0 \\ -2 & 2 & 4 & -1 & -5 & 2 & 3 & -1 \\ -1 & 2 & 3 & -1 & -4 & 2 & 2 & -1 \\ -1 & 2 & 2 & -1 & -3 & 2 & 1 & 0 \\ 0 & 2 & 1 & -1 & -2 & 1 & 1 & 0 \\ 0 & 1 & 0 & 0 & -1 & 0 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 1 & -1 & 0 & -1 & 1 & 1 & -1 \\ 0 & 0 & -1 & 0 & -1 & 2 & 1 & -2 \\ 1 & 1 & -2 & 0 & -2 & 3 & 1 & -2 \\ 1 & 1 & -2 & 0 & -3 & 4 & 2 & -4 \\ 1 & 0 & -2 & 1 & -3 & 3 & 2 & -3 \\ 1 & 0 & -2 & 1 & -2 & 2 & 1 & -2 \\ 0 & 0 & -1 & 1 & -2 & 2 & 0 & -1 \\ 0 & 0 & -1 & 1 & -1 & 1 & 0 & -1 \end{pmatrix}, \\
\begin{pmatrix} 0 & 1 & -1 & 0 & 0 & 1 & -2 & 1 \\ 0 & 1 & -1 & -1 & 1 & 2 & -3 & 1 \\ 0 & 1 & -2 & 0 & 0 & 3 & -4 & 2 \\ 0 & 1 & -2 & -1 & 1 & 4 & -6 & 3 \\ 0 & 1 & -2 & -1 & 1 & 3 & -4 & 2 \\ 0 & 0 & -2 & 0 & 1 & 2 & -3 & 1 \\ -1 & 0 & -1 & 0 & 1 & 1 & -2 & 1 \\ -1 & 0 & 0 & 0 & 0 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 0 & -1 & 0 & 0 & 0 & 2 \\ -1 & 1 & 1 & -1 & 0 & -1 & 0 & 3 \\ 0 & 2 & 1 & -2 & 0 & -1 & 0 & 4 \\ -1 & 3 & 2 & -3 & 0 & -1 & -1 & 6 \\ -1 & 2 & 2 & -2 & -1 & 0 & -1 & 5 \\ -1 & 2 & 1 & -1 & -1 & 0 & -1 & 4 \\ 0 & 1 & 0 & 0 & -1 & 0 & -1 & 3 \\ 0 & 1 & 0 & 0 & -1 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 0 & 0 & -2 & 2 & -1 & 1 \\ -1 & 2 & 1 & -1 & -2 & 3 & -2 & 1 \\ -1 & 2 & 1 & -1 & -3 & 4 & -2 & 2 \\ -2 & 3 & 2 & -2 & -4 & 6 & -3 & 2 \\ -1 & 3 & 1 & -2 & -3 & 5 & -2 & 1 \\ -1 & 2 & 0 & -1 & -2 & 4 & -2 & 1 \\ -1 & 2 & 0 & -1 & -1 & 2 & -1 & 1 \\ -1 & 1 & 0 & 0 & -1 & 1 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 1 & -1 & -2 & 2 & -1 & 0 & 1 & 0 \\ 2 & -2 & -3 & 3 & -1 & 0 & 1 & -1 \\ 3 & -2 & -4 & 3 & -1 & 0 & 2 & -1 \\ 4 & -3 & -6 & 5 & -1 & -1 & 3 & -2 \\ 4 & -2 & -5 & 4 & -1 & -1 & 2 & -1 \\ 3 & -1 & -4 & 3 & -1 & -1 & 2 & -1 \\ 2 & 0 & -3 & 2 & -1 & 0 & 1 & -1 \\ 1 & 0 & -2 & 1 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & -1 & -1 & 0 & 1 & 0 & 0 & 1 \\ 1 & -2 & -2 & 1 & 1 & 1 & -1 & 1 \\ 2 & -2 & -2 & 0 & 2 & 1 & -1 & 1 \\ 3 & -3 & -4 & 1 & 3 & 1 & -2 & 2 \\ 3 & -3 & -3 & 1 & 2 & 1 & -2 & 2 \\ 3 & -2 & -3 & 1 & 1 & 1 & -1 & 1 \\ 2 & -1 & -2 & 1 & 0 & 1 & -1 & 1 \\ 1 & 0 & -1 & 0 & 0 & 1 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 1 & -1 & 1 & -1 & 0 & 1 & -1 & 1 \\ 2 & -1 & 0 & -1 & 0 & 2 & -2 & 1 \\ 2 & -2 & 1 & -2 & 1 & 2 & -2 & 1 \\ 3 & -2 & 1 & -3 & 1 & 3 & -3 & 2 \\ 3 & -1 & 1 & -3 & 1 & 2 & -2 & 1 \\ 3 & -1 & 0 & -2 & 1 & 1 & -1 & 1 \\ 2 & 0 & 0 & -2 & 1 & 1 & -1 & 1 \\ 1 & 0 & 0 & -1 & 0 & 1 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} -2 & 0 & 1 & 0 & 0 & 0 & 1 & -2 \\ -3 & 0 & 2 & 0 & -1 & 1 & 1 & -2 \\ -4 & 1 & 2 & 0 & -1 & 1 & 1 & -3 \\ -5 & 1 & 3 & 0 & -2 & 2 & 2 & -5 \\ -4 & 0 & 2 & 1 & -2 & 2 & 1 & -4 \\ -3 & 0 & 2 & 0 & -1 & 2 & 0 & -3 \\ -2 & 0 & 2 & 0 & -1 & 1 & 0 & -2 \\ -1 & 0 & 1 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 1 & -1 & 0 & 0 & 1 & -2 \\ 2 & 0 & 0 & -1 & 0 & 0 & 2 & -3 \\ 2 & -1 & 1 & -1 & 0 & 0 & 2 & -4 \\ 3 & -1 & 1 & -1 & -1 & 0 & 4 & -6 \\ 2 & -1 & 1 & -1 & 0 & -1 & 4 & -5 \\ 2 & -1 & 1 & -1 & 0 & -1 & 3 & -3 \\ 1 & -1 & 1 & -1 & 0 & 0 & 2 & -2 \\ 1 & -1 & 0 & 0 & 0 & 0 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 1 & 1 & -2 & 1 & 0 & -1 & 0 & 1 \\ 1 & 1 & -2 & 1 & 1 & -3 & 1 & 1 \\ 2 & 1 & -3 & 2 & 0 & -3 & 1 & 2 \\ 2 & 1 & -4 & 3 & 1 & -5 & 1 & 3 \\ 1 & 1 & -3 & 2 & 1 & -4 & 1 & 3 \\ 0 & 1 & -2 & 2 & 0 & -3 & 1 & 2 \\ 0 & 0 & -2 & 2 & 0 & -2 & 1 & 1 \\ 0 & 0 & -1 & 1 & 0 & -1 & 0 & 1 \end{pmatrix}, \\
\begin{pmatrix} 1 & 1 & -1 & 0 & -1 & 1 & 1 & -1 \\ 0 & 1 & -1 & 0 & -1 & 2 & 1 & -2 \\ 1 & 1 & -1 & 0 & -2 & 3 & 1 & -2 \\ 1 & 1 & -2 & 1 & -3 & 4 & 2 & -4 \\ 1 & 0 & -2 & 1 & -2 & 3 & 2 & -3 \\ 1 & 0 & -2 & 1 & -2 & 3 & 1 & -2 \\ 0 & 0 & -1 & 1 & -2 & 2 & 1 & -1 \\ 0 & 0 & -1 & 1 & -1 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 1 & 1 & -2 & 0 & 0 & 1 & 0 \\ 1 & 1 & 1 & -2 & 0 & -1 & 2 & 0 \\ 2 & 1 & 2 & -3 & 0 & -1 & 2 & 0 \\ 2 & 2 & 3 & -4 & -1 & -1 & 3 & 0 \\ 1 & 1 & 3 & -3 & -1 & -1 & 3 & 0 \\ 1 & 1 & 2 & -2 & -1 & -1 & 2 & 1 \\ 1 & 0 & 1 & -1 & -1 & 0 & 1 & 1 \\ 1 & 0 & 0 & 0 & -1 & 0 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 2 & 0 & -1 & 0 & 0 & 0 & -1 & 2 \\ 3 & 0 & -2 & 0 & 1 & -1 & -1 & 2 \\ 4 & -1 & -2 & 0 & 1 & -1 & -1 & 3 \\ 5 & -1 & -3 & 0 & 2 & -2 & -2 & 5 \\ 4 & 0 & -2 & -1 & 2 & -2 & -1 & 4 \\ 3 & 0 & -2 & 0 & 1 & -2 & 0 & 3 \\ 2 & 0 & -2 & 0 & 1 & -1 & 0 & 2 \\ 1 & 0 & -1 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}.
\end{pmatrix}$$

The character table of G^{s_2} :

	10																20									
$\chi_2^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
$\chi_2^{(2)}$	1	1	1	1	-1	-1	1	-1	1	-1	-1	1	-1	1	1	-1	-1	1	-1	1	1	-1	1	-1		
$\chi_2^{(3)}$	1	A	/A	1	/A	1	/A	/A	A	/A	1	A	A	1	1	1	1	A	A	1	/A	A	/A	/A		
$\chi_2^{(4)}$	1	A	/A	1	-/A	-1	/A	-/A	A	-/A	-1	A	-A	1	1	-1	-1	A	-A	1	/A	-A	/A	-/A		
$\chi_2^{(5)}$	1	/A	A	1	A	1	A	A	/A	A	1	/A	/A	1	1	1	1	/A	/A	1	A	/A	A	A		
$\chi_2^{(6)}$	1	/A	A	1	-A	-1	A	-A	/A	-A	-1	/A	-/A	1	1	-1	-1	/A	-/A	1	A	-/A	A	-A		
$\chi_2^{(7)}$	1	B	1	/B	B	1	/B	E	E	/E	B	/E	1	/E	E	E	/E	1	/E	B	/E	E	E	/B		
$\chi_2^{(8)}$	1	B	1	/B	-B	-1	/B	-E	E	-/E	-B	/E	-1	/E	E	-E	-/E	1	-/E	B	/E	-E	E	-/B		
$\chi_2^{(9)}$	1	C	/A	/B	D	1	/C	G	F	/F	B	/G	A	/E	E	E	/E	A	/G	B	/F	F	G	/C		
$\chi_2^{(10)}$	1	C	/A	/B	-D	-1	/C	-G	F	-/F	-B	/G	-A	/E	E	-E	-/E	A	-/G	B	/F	-F	G	-/C		
$\chi_2^{(11)}$	1	D	A	/B	C	1	/D	F	G	/G	B	/F	/A	/E	E	E	/E	/A	/F	B	/G	G	F	/D		
$\chi_2^{(12)}$	1	D	A	/B	-C	-1	/D	-F	G	-/G	-B	/F	-/A	/E	E	-E	-/E	/A	-/F	B	/G	-G	F	-/D		
$\chi_2^{(13)}$	1	E	1	/E	E	1	/E	/B	/B	B	E	B	1	B	/B	/B	B	1	B	E	B	/B	/B	/E		
$\chi_2^{(14)}$	1	E	1	/E	-E	-1	/E	-/B	/B	-B	-E	B	-1	B	/B	-/B	-B	1	-B	E	B	-/B	/B	-/E		
$\chi_2^{(15)}$	1	F	/A	/E	G	1	/F	/C	/D	D	E	C	A	B	/B	/B	B	A	C	E	D	/D	/C	/F		
$\chi_2^{(16)}$	1	F	/A	/E	-G	-1	/F	-/C	/D	-D	-E	C	-A	B	/B	-/B	-B	A	-C	E	D	-/D	/C	-/F		
$\chi_2^{(17)}$	1	G	A	/E	F	1	/G	/D	/C	C	E	D	/A	B	/B	/B	B	/A	D	E	C	/C	/D	/G		
$\chi_2^{(18)}$	1	G	A	/E	-F	-1	/G	-/D	/C	-C	-E	D	-/A	B	/B	-/B	-B	/A	-D	E	C	-/C	/D	-/G		
$\chi_2^{(19)}$	1	/E	1	E	/E	1	E	B	B	/B	/E	/B	1	/B	B	B	/B	1	/B	/E	/B	B	B	E		
$\chi_2^{(20)}$	1	/E	1	E	-/E	-1	E	-B	B	-/B	-/E	/B	-1	/B	B	-B	-/B	1	-/B	/E	/B	-B	B	-E		
$\chi_2^{(21)}$	1	/G	/A	E	/F	1	G	D	C	/C	/E	/D	A	/B	B	B	/B	A	/D	/E	/C	C	D	G		
$\chi_2^{(22)}$	1	/G	/A	E	-/F	-1	G	-D	C	-/C	-/E	/D	-A	/B	B	-B	-/B	A	-/D	/E	/C	-C	D	-G		
$\chi_2^{(23)}$	1	/F	A	E	/G	1	F	C	D	/D	/E	/C	/A	/B	B	B	/B	/A	/C	/E	/D	D	C	F		
$\chi_2^{(24)}$	1	/F	A	E	-/G	-1	F	-C	D	-/D	-/E	/C	-/A	/B	B	-B	-/B	/A	-/C	/E	/D	-D	C	-F		
$\chi_2^{(25)}$	1	/B	1	B	/B	1	B	/E	/E	E	/B	E	1	E	/E	/E	E	1	E	/B	E	/E	/E	B		
$\chi_2^{(26)}$	1	/B	1	B	-/B	-1	B	-/E	/E	-E	-/B	E	-1	E	/E	-/E	-E	1	-E	/B	E	-/E	/E	-B		
$\chi_2^{(27)}$	1	/D	/A	B	/C	1	D	/F	/G	G	/B	F	A	E	/E	/E	E	A	F	/B	G	/G	/F	D		
$\chi_2^{(28)}$	1	/D	/A	B	-/C	-1	D	-/F	/G	-G	-/B	F	-A	E	/E	-/E	-E	A	-F	/B	G	-/G	/F	-D		
$\chi_2^{(29)}$	1	/C	A	B	/D	1	C	/G	/F	F	/B	G	/A	E	/E	/E	E	/A	G	/B	F	/F	/G	C		
$\chi_2^{(30)}$	1	/C	A	B	-/D	-1	C	-/G	/F	-F	-/B	G	-/A	E	/E	-/E	-E	/A	-G	/B	F	-/F	/G	-C		

	30					
$\chi_2^{(1)}$	1	1	1	1	1	1
$\chi_2^{(2)}$	-1	1	-1	-1	-1	1
$\chi_2^{(3)}$	A	/A	1	/A	A	A
$\chi_2^{(4)}$	-A	/A	-1	-/A	-A	A
$\chi_2^{(5)}$	/A	A	1	A	/A	/A
$\chi_2^{(6)}$	-/A	A	-1	-A	-/A	/A
$\chi_2^{(7)}$	/B	B	/B	1	B	/B
$\chi_2^{(8)}$	-/B	B	-/B	-1	-B	/B
$\chi_2^{(9)}$	/D	D	/B	/A	C	/D
$\chi_2^{(10)}$	-/D	D	-/B	-/A	-C	/D
$\chi_2^{(11)}$	/C	C	/B	A	D	/C
$\chi_2^{(12)}$	-/C	C	-/B	-A	-D	/C
$\chi_2^{(13)}$	/E	E	/E	1	E	/E
$\chi_2^{(14)}$	-/E	E	-/E	-1	-E	/E
$\chi_2^{(15)}$	/G	G	/E	/A	F	/G
$\chi_2^{(16)}$	-/G	G	-/E	-/A	-F	/G
$\chi_2^{(17)}$	/F	F	/E	A	G	/F
$\chi_2^{(18)}$	-/F	F	-/E	-A	-G	/F
$\chi_2^{(19)}$	E	/E	E	1	/E	E
$\chi_2^{(20)}$	-E	/E	-E	-1	-/E	E
$\chi_2^{(21)}$	F	/F	E	/A	/G	F
$\chi_2^{(22)}$	-F	/F	-E	-/A	-/G	F
$\chi_2^{(23)}$	G	/G	E	A	/F	G
$\chi_2^{(24)}$	-G	/G	-E	-A	-/F	G
$\chi_2^{(25)}$	B	/B	B	1	/B	B
$\chi_2^{(26)}$	-B	/B	-B	-1	-/B	B
$\chi_2^{(27)}$	C	/C	B	/A	/D	C
$\chi_2^{(28)}$	-C	/C	-B	-/A	-/D	C
$\chi_2^{(29)}$	D	/D	B	A	/C	D
$\chi_2^{(30)}$	-D	/D	-B	-A	-/C	D

where $A = E(3)^2 = (-1-ER(-3))/2 = -1-b3$, $B = E(5)$, $C = E(15)^{13}$, $D = E(15)^8$, $E = E(5)^2$, $F = E(15)$, $G = E(15)^{11}$.

The generators of G^{s_3} are:

$$\begin{pmatrix} 1 & -1 & -1 & 0 & 1 & 0 & 0 & 1 \\ 1 & -2 & -2 & 1 & 1 & 1 & -1 & 1 \\ 2 & -2 & -2 & 0 & 2 & 1 & -1 & 1 \\ 3 & -3 & -4 & 1 & 3 & 1 & -2 & 2 \\ 3 & -3 & -3 & 1 & 2 & 1 & -2 & 2 \\ 3 & -2 & -3 & 1 & 1 & 1 & -1 & 1 \\ 2 & -1 & -2 & 1 & 0 & 1 & -1 & 1 \\ 1 & 0 & -1 & 0 & 0 & 1 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 1 & -1 & 0 & 0 & 1 & -2 & 1 \\ 0 & 1 & -1 & -1 & 1 & 2 & -3 & 1 \\ 0 & 1 & -2 & 0 & 0 & 3 & -4 & 2 \\ 0 & 1 & -2 & -1 & 1 & 4 & -6 & 3 \\ 0 & 1 & -2 & -1 & 1 & 3 & -4 & 2 \\ 0 & 0 & -2 & 0 & 1 & 2 & -3 & 1 \\ -1 & 0 & -1 & 0 & 1 & 1 & -2 & 1 \\ -1 & 0 & 0 & 0 & 0 & 1 & -1 & 0 \end{pmatrix}.$$

The representatives of conjugacy classes of G^{s_3} are:

$$\begin{pmatrix} 0 & 0 & 1 & -2 & 2 & 0 & -1 & 1 \\ -1 & 0 & 1 & -2 & 2 & 1 & -2 & 2 \\ -1 & 0 & 2 & -3 & 3 & 1 & -3 & 2 \\ -1 & 0 & 2 & -4 & 4 & 2 & -5 & 4 \\ -1 & -1 & 2 & -3 & 3 & 2 & -4 & 3 \\ 0 & -1 & 1 & -2 & 2 & 2 & -3 & 2 \\ 0 & -1 & 1 & -1 & 1 & 1 & -2 & 2 \\ 0 & 0 & 1 & -1 & 0 & 1 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 1 & 0 & -2 & 1 & 1 & 0 \\ -1 & 1 & 2 & 0 & -3 & 1 & 1 & 0 \\ -1 & 1 & 3 & -1 & -3 & 1 & 2 & 0 \\ -2 & 2 & 4 & -1 & -5 & 2 & 3 & -1 \\ -1 & 2 & 3 & -1 & -4 & 2 & 2 & -1 \\ -1 & 2 & 2 & -1 & -3 & 2 & 1 & 0 \\ 0 & 2 & 1 & -1 & -2 & 1 & 1 & 0 \\ 0 & 1 & 0 & 0 & -1 & 0 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 1 & -1 & 0 & -1 & 1 & 1 & -1 \\ 0 & 0 & -1 & 0 & -1 & 2 & 1 & -2 \\ 1 & 1 & -2 & 0 & -2 & 3 & 1 & -2 \\ 1 & 1 & -2 & 0 & -3 & 4 & 2 & -4 \\ 1 & 0 & -2 & 1 & -3 & 3 & 2 & -3 \\ 1 & 0 & -2 & 1 & -2 & 2 & 1 & -2 \\ 0 & 0 & -1 & 1 & -2 & 2 & 0 & -1 \\ 0 & 0 & -1 & 1 & -1 & 1 & 0 & -1 \end{pmatrix}, \\
\begin{pmatrix} 0 & 1 & -1 & 0 & 0 & 1 & -2 & 1 \\ 0 & 1 & -1 & -1 & 1 & 2 & -3 & 1 \\ 0 & 1 & -2 & 0 & 0 & 3 & -4 & 2 \\ 0 & 1 & -2 & -1 & 1 & 4 & -6 & 3 \\ 0 & 1 & -2 & -1 & 1 & 3 & -4 & 2 \\ 0 & 0 & -2 & 0 & 1 & 2 & -3 & 1 \\ -1 & 0 & -1 & 0 & 1 & 1 & -2 & 1 \\ -1 & 0 & 0 & 0 & 0 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 0 & -1 & 0 & 0 & 0 & 2 \\ -1 & 1 & 1 & -1 & 0 & -1 & 0 & 3 \\ 0 & 2 & 1 & -2 & 0 & -1 & 0 & 4 \\ -1 & 3 & 2 & -3 & 0 & -1 & -1 & 6 \\ -1 & 2 & 2 & -2 & -1 & 0 & -1 & 5 \\ -1 & 2 & 1 & -1 & -1 & 0 & -1 & 4 \\ 0 & 1 & 0 & 0 & -1 & 0 & -1 & 3 \\ 0 & 1 & 0 & 0 & -1 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 0 & 0 & -2 & 2 & -1 & 1 \\ -1 & 2 & 1 & -1 & -2 & 3 & -2 & 1 \\ -1 & 2 & 1 & -1 & -3 & 4 & -2 & 2 \\ -2 & 3 & 2 & -2 & -4 & 6 & -3 & 2 \\ -1 & 3 & 1 & -2 & -3 & 5 & -2 & 1 \\ -1 & 2 & 0 & -1 & -2 & 4 & -2 & 1 \\ -1 & 2 & 0 & -1 & -1 & 2 & -1 & 1 \\ -1 & 1 & 0 & 0 & -1 & 1 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 1 & -1 & -2 & 2 & -1 & 0 & 1 & 0 \\ 2 & -2 & -3 & 3 & -1 & 0 & 1 & -1 \\ 3 & -2 & -4 & 3 & -1 & 0 & 2 & -1 \\ 4 & -3 & -6 & 5 & -1 & -1 & 3 & -2 \\ 4 & -2 & -5 & 4 & -1 & -1 & 2 & -1 \\ 3 & -1 & -4 & 3 & -1 & -1 & 2 & -1 \\ 2 & 0 & -3 & 2 & -1 & 0 & 1 & -1 \\ 1 & 0 & -2 & 1 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & -1 & -1 & 0 & 1 & 0 & 0 & 1 \\ 1 & -2 & -2 & 1 & 1 & 1 & -1 & 1 \\ 2 & -2 & -2 & 0 & 2 & 1 & -1 & 1 \\ 3 & -3 & -4 & 1 & 3 & 1 & -2 & 2 \\ 3 & -3 & -3 & 1 & 2 & 1 & -2 & 2 \\ 3 & -2 & -3 & 1 & 1 & 1 & -1 & 1 \\ 2 & -1 & -2 & 1 & 0 & 1 & -1 & 1 \\ 1 & 0 & -1 & 0 & 0 & 1 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 1 & -1 & 1 & -1 & 0 & 1 & -1 & 1 \\ 2 & -1 & 0 & -1 & 0 & 2 & -2 & 1 \\ 2 & -2 & 1 & -2 & 1 & 2 & -2 & 1 \\ 3 & -2 & 1 & -3 & 1 & 3 & -3 & 2 \\ 3 & -1 & 1 & -3 & 1 & 2 & -2 & 1 \\ 3 & -1 & 0 & -2 & 1 & 1 & -1 & 1 \\ 2 & 0 & 0 & -2 & 1 & 1 & -1 & 1 \\ 1 & 0 & 0 & -1 & 0 & 1 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} -2 & 0 & 1 & 0 & 0 & 0 & 1 & -2 \\ -3 & 0 & 2 & 0 & -1 & 1 & 1 & -2 \\ -4 & 1 & 2 & 0 & -1 & 1 & 1 & -3 \\ -5 & 1 & 3 & 0 & -2 & 2 & 2 & -5 \\ -4 & 0 & 2 & 1 & -2 & 2 & 1 & -4 \\ -3 & 0 & 2 & 0 & -1 & 2 & 0 & -3 \\ -2 & 0 & 2 & 0 & -1 & 1 & 0 & -2 \\ -1 & 0 & 1 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 1 & -1 & 0 & 0 & 1 & -2 \\ 2 & 0 & 0 & -1 & 0 & 0 & 2 & -3 \\ 2 & -1 & 1 & -1 & 0 & 0 & 2 & -4 \\ 3 & -1 & 1 & -1 & -1 & 0 & 4 & -6 \\ 2 & -1 & 1 & -1 & 0 & -1 & 4 & -5 \\ 2 & -1 & 1 & -1 & 0 & -1 & 3 & -3 \\ 1 & -1 & 1 & -1 & 0 & 0 & 2 & -2 \\ 1 & -1 & 0 & 0 & 0 & 0 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 1 & 1 & -2 & 1 & 0 & -1 & 0 & 1 \\ 1 & 1 & -2 & 1 & 1 & -3 & 1 & 1 \\ 2 & 1 & -3 & 2 & 0 & -3 & 1 & 2 \\ 2 & 1 & -4 & 3 & 1 & -5 & 1 & 3 \\ 1 & 1 & -3 & 2 & 1 & -4 & 1 & 3 \\ 0 & 1 & -2 & 2 & 0 & -3 & 1 & 2 \\ 0 & 0 & -2 & 2 & 0 & -2 & 1 & 1 \\ 0 & 0 & -1 & 1 & 0 & -1 & 0 & 1 \end{pmatrix}, \\
\begin{pmatrix} 1 & 1 & -1 & 0 & -1 & 1 & 1 & -1 \\ 0 & 1 & -1 & 0 & -1 & 2 & 1 & -2 \\ 1 & 1 & -1 & 0 & -2 & 3 & 1 & -2 \\ 1 & 1 & -2 & 1 & -3 & 4 & 2 & -4 \\ 1 & 0 & -2 & 1 & -2 & 3 & 2 & -3 \\ 1 & 0 & -2 & 1 & -2 & 3 & 1 & -2 \\ 0 & 0 & -1 & 1 & -2 & 2 & 1 & -1 \\ 0 & 0 & -1 & 1 & -1 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 1 & 1 & -2 & 0 & 0 & 1 & 0 \\ 1 & 1 & 1 & -2 & 0 & -1 & 2 & 0 \\ 2 & 1 & 2 & -3 & 0 & -1 & 2 & 0 \\ 2 & 2 & 3 & -4 & -1 & -1 & 3 & 0 \\ 1 & 1 & 3 & -3 & -1 & -1 & 3 & 0 \\ 1 & 1 & 2 & -2 & -1 & -1 & 2 & 1 \\ 1 & 0 & 1 & -1 & -1 & 0 & 1 & 1 \\ 1 & 0 & 0 & 0 & -1 & 0 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 2 & 0 & -1 & 0 & 0 & 0 & -1 & 2 \\ 3 & 0 & -2 & 0 & 1 & -1 & -1 & 2 \\ 4 & -1 & -2 & 0 & 1 & -1 & -1 & 3 \\ 5 & -1 & -3 & 0 & 2 & -2 & -2 & 5 \\ 4 & 0 & -2 & -1 & 2 & -2 & -1 & 4 \\ 3 & 0 & -2 & 0 & 1 & -2 & 0 & 3 \\ 2 & 0 & -2 & 0 & 1 & -1 & 0 & 2 \\ 1 & 0 & -1 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}.
\end{pmatrix}$$

The character table of G^{s_3} :

	10										20									
$\chi_3^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_3^{(2)}$	1	1	1	1	-1	-1	1	-1	1	-1	-1	1	-1	1	1	-1	-1	1	-1	1
$\chi_3^{(3)}$	1	A	/A	1	-/A	-1	/A	-/A	A	-/A	-1	A	-A	1	1	-1	-1	A	-A	1
$\chi_3^{(4)}$	1	/A	A	1	-A	-1	A	-A	/A	-A	-1	/A	-/A	1	1	-1	-1	/A	-/A	1
$\chi_3^{(5)}$	1	/A	A	1	A	1	A	A	/A	A	1	/A	/A	1	1	1	1	/A	/A	1
$\chi_3^{(6)}$	1	A	/A	1	/A	1	/A	/A	A	/A	1	A	A	1	1	1	1	A	A	1
$\chi_3^{(7)}$	1	B	1	/B	-B	-1	/B	-C	C	-/C	-B	/C	-1	/C	C	-C	-/C	1	-/C	B
$\chi_3^{(8)}$	1	C	1	/C	-C	-1	/C	-/B	/B	-B	-C	B	-1	B	/B	-/B	-B	1	-B	C
$\chi_3^{(9)}$	1	/C	1	C	-/C	-1	C	-B	B	-/B	-/C	/B	-1	/B	B	-B	-/B	1	-/B	/C
$\chi_3^{(10)}$	1	/B	1	B	-/B	-1	B	-/C	/C	-C	-/B	C	-1	C	/C	-/C	-C	1	-C	/B
$\chi_3^{(11)}$	1	/B	1	B	/B	1	B	/C	/C	C	/B	C	1	C	/C	/C	C	1	C	/B
$\chi_3^{(12)}$	1	/C	1	C	/C	1	C	B	B	/B	/C	/B	1	/B	B	B	/B	1	/B	/C
$\chi_3^{(13)}$	1	C	1	/C	C	1	/C	/B	/B	B	C	B	1	B	/B	/B	B	1	B	C
$\chi_3^{(14)}$	1	B	1	/B	B	1	/B	C	C	/C	B	/C	1	/C	C	C	/C	1	/C	B
$\chi_3^{(15)}$	1	D	A	/C	-/F	-1	/D	-E	G	-/G	-C	/E	-/A	B	/B	-/B	-B	/A	-/E	C
$\chi_3^{(16)}$	1	E	/A	B	-G	-1	/E	-F	/D	-D	-/B	/F	-A	C	/C	-/C	-C	A	-/F	/B
$\chi_3^{(17)}$	1	F	A	C	-/D	-1	/F	-/G	/E	-E	-/C	G	-/A	/B	B	-B	-/B	/A	-G	/C
$\chi_3^{(18)}$	1	G	A	B	-E	-1	/G	-/D	F	-/F	-/B	D	-/A	C	/C	-/C	-C	/A	-D	/B
$\chi_3^{(19)}$	1	/G	/A	/B	-/E	-1	G	-D	/F	-F	-B	/D	-A	/C	C	-C	-/C	A	-/D	B
$\chi_3^{(20)}$	1	/F	/A	/C	-D	-1	F	-G	E	-/E	-C	/G	-A	B	/B	-/B	-B	A	-/G	C
$\chi_3^{(21)}$	1	/E	A	/B	-/G	-1	E	-/F	D	-/D	-B	F	-/A	/C	C	-C	-/C	/A	-F	B
$\chi_3^{(22)}$	1	/D	/A	C	-F	-1	D	-/E	/G	-G	-/C	E	-A	/B	B	-B	-/B	A	-E	/C
$\chi_3^{(23)}$	1	/D	/A	C	F	1	D	/E	/G	G	/C	E	A	/B	B	B	/B	A	E	/C
$\chi_3^{(24)}$	1	/E	A	/B	/G	1	E	/F	D	/D	B	F	/A	/C	C	C	/C	/A	F	B
$\chi_3^{(25)}$	1	/F	/A	/C	D	1	F	G	E	/E	C	/G	A	B	/B	/B	B	A	/G	C
$\chi_3^{(26)}$	1	/G	/A	/B	/E	1	G	D	/F	F	B	/D	A	/C	C	C	/C	A	/D	B
$\chi_3^{(27)}$	1	G	A	B	E	1	/G	/D	F	/F	/B	D	/A	C	/C	/C	C	/A	D	/B
$\chi_3^{(28)}$	1	F	A	C	/D	1	/F	/G	/E	E	/C	G	/A	/B	B	B	/B	/A	G	/C
$\chi_3^{(29)}$	1	E	/A	B	G	1	/E	F	/D	D	/B	/F	A	C	/C	/C	C	A	/F	/B
$\chi_3^{(30)}$	1	D	A	/C	/F	1	/D	E	G	/G	C	/E	/A	B	/B	/B	B	/A	/E	C

$\chi_3^{(1)}$	1	1	1	1	1	1
$\chi_3^{(2)}$	-1	1	-1	-1	-1	1
$\chi_3^{(3)}$	-A	/A	-1	-/A	-A	A
$\chi_3^{(4)}$	-/A	A	-1	-A	-/A	/A
$\chi_3^{(5)}$	/A	A	1	A	/A	/A
$\chi_3^{(6)}$	A	/A	1	/A	A	A
$\chi_3^{(7)}$	-/B	B	-/B	-1	-B	/B
$\chi_3^{(8)}$	-/C	C	-/C	-1	-C	/C
$\chi_3^{(9)}$	-C	/C	-C	-1	-/C	C
$\chi_3^{(10)}$	-B	/B	-B	-1	-/B	B
$\chi_3^{(11)}$	B	/B	B	1	/B	B
$\chi_3^{(12)}$	C	/C	C	1	/C	C
$\chi_3^{(13)}$	/C	C	/C	1	C	/C
$\chi_3^{(14)}$	/B	B	/B	1	B	/B
$\chi_3^{(15)}$	-F	/F	-/C	-A	-D	F
$\chi_3^{(16)}$	-/G	G	-B	-/A	-E	/G
$\chi_3^{(17)}$	-D	/D	-C	-A	-F	D
$\chi_3^{(18)}$	-/E	E	-B	-A	-G	/E
$\chi_3^{(19)}$	-E	/E	-/B	-/A	-/G	E
$\chi_3^{(20)}$	-/D	D	-/C	-/A	-/F	/D
$\chi_3^{(21)}$	-G	/G	-/B	-A	-/E	G
$\chi_3^{(22)}$	-/F	F	-C	-/A	-/D	/F
$\chi_3^{(23)}$	/F	F	C	/A	/D	/F
$\chi_3^{(24)}$	G	/G	/B	A	/E	G
$\chi_3^{(25)}$	/D	D	/C	/A	/F	/D
$\chi_3^{(26)}$	E	/E	/B	/A	/G	E
$\chi_3^{(27)}$	/E	E	B	A	G	/E
$\chi_3^{(28)}$	D	/D	C	A	F	D
$\chi_3^{(29)}$	/G	G	B	/A	E	/G
$\chi_3^{(30)}$	F	/F	/C	A	D	F

where $A = E(3) = (-1+ER(-3))/2 = b3$, $B = E(5)^2$, $C = E(5)^4$, $D = E(15)^7$, $E = E(15)^{14}$, $F = E(15)^{13}$, $G = E(15)^4$.

The generators of G^{s_4} are:

$$\begin{pmatrix} 0 & 1 & 0 & -1 & 0 & 0 & 0 & 2 \\ -1 & 1 & 1 & -1 & 0 & -1 & 0 & 3 \\ 0 & 2 & 1 & -2 & 0 & -1 & 0 & 4 \\ -1 & 3 & 2 & -3 & 0 & -1 & -1 & 6 \\ -1 & 2 & 2 & -2 & -1 & 0 & -1 & 5 \\ -1 & 2 & 1 & -1 & -1 & 0 & -1 & 4 \\ 0 & 1 & 0 & 0 & -1 & 0 & -1 & 3 \\ 0 & 1 & 0 & 0 & -1 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} -1 & -2 & 0 & 1 & 0 & 1 & 0 & -1 \\ -2 & -3 & 1 & 1 & 1 & 0 & 0 & -1 \\ -2 & -4 & 1 & 1 & 1 & 1 & 0 & -2 \\ -4 & -6 & 2 & 2 & 1 & 1 & 0 & -2 \\ -3 & -5 & 1 & 2 & 1 & 1 & -1 & -1 \\ -3 & -3 & 1 & 1 & 1 & 1 & -1 & -1 \\ -2 & -2 & 1 & 0 & 1 & 1 & -1 & 0 \\ -1 & -1 & 1 & 0 & 0 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 0 & 0 & 0 & 0 & 0 & 2 \\ -3 & 0 & 1 & 0 & 0 & 0 & 0 & 2 \\ -3 & 0 & 1 & 0 & 0 & 0 & 0 & 3 \\ -5 & -1 & 1 & 1 & 0 & 0 & 0 & 4 \\ -4 & -1 & 1 & 1 & -1 & 1 & 0 & 3 \\ -3 & 0 & 0 & 1 & -1 & 1 & 0 & 2 \\ -2 & 0 & 0 & 1 & -1 & 0 & 1 & 1 \\ -1 & 0 & 0 & 1 & -1 & 0 & 0 & 1 \end{pmatrix}, \\
\begin{pmatrix} -1 & -1 & -1 & 1 & 1 & -1 & 1 & -1 \\ -3 & -1 & 0 & 1 & 1 & -1 & 1 & -1 \\ -3 & -1 & -1 & 2 & 1 & -2 & 2 & -2 \\ -5 & -2 & -1 & 3 & 1 & -2 & 3 & -3 \\ -4 & -2 & -1 & 3 & 0 & -1 & 2 & -2 \\ -3 & -1 & -1 & 2 & 0 & 0 & 1 & -2 \\ -2 & -1 & 0 & 1 & 0 & 0 & 1 & -2 \\ -1 & -1 & 0 & 1 & 0 & 0 & 0 & -1 \end{pmatrix}.$$

The representatives of conjugacy classes of G^{s_4} are:

$$\begin{pmatrix} 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 0 & -1 & 0 & 0 & 0 & 2 \\ -1 & 1 & 1 & -1 & 0 & -1 & 0 & 3 \\ 0 & 2 & 1 & -2 & 0 & -1 & 0 & 4 \\ -1 & 3 & 2 & -3 & 0 & -1 & -1 & 6 \\ -1 & 2 & 2 & -2 & -1 & 0 & -1 & 5 \\ -1 & 2 & 1 & -1 & -1 & 0 & -1 & 4 \\ 0 & 1 & 0 & 0 & -1 & 0 & -1 & 3 \\ 0 & 1 & 0 & 0 & -1 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & -1 & 2 & -2 & 0 & 1 & -1 \\ 1 & 0 & -1 & 2 & -2 & -1 & 2 & -2 \\ 1 & 0 & -2 & 3 & -3 & -1 & 3 & -2 \\ 1 & 0 & -2 & 4 & -4 & -2 & 5 & -4 \\ 1 & 1 & -2 & 3 & -3 & -2 & 4 & -3 \\ 0 & 1 & -1 & 2 & -2 & -2 & 3 & -2 \\ 0 & 1 & -1 & 1 & -1 & -1 & 2 & -2 \\ 0 & 0 & -1 & 1 & 0 & -1 & 1 & -1 \end{pmatrix}, \\
\begin{pmatrix} -1 & -1 & 2 & -1 & 0 & 1 & 0 & -1 \\ -1 & -1 & 2 & -1 & -1 & 3 & -1 & -1 \\ -2 & -1 & 3 & -2 & 0 & 3 & -1 & -2 \\ -2 & -1 & 4 & -3 & -1 & 5 & -1 & -3 \\ -1 & -1 & 3 & -2 & -1 & 4 & -1 & -3 \\ 0 & -1 & 2 & -2 & 0 & 3 & -1 & -2 \\ 0 & 0 & 2 & -2 & 0 & 2 & -1 & -1 \\ 0 & 0 & 1 & -1 & 0 & 1 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & -1 & 0 & 2 & -1 & -1 & 0 \\ 1 & -1 & -2 & 0 & 3 & -1 & -1 & 0 \\ 1 & -1 & -3 & 1 & 3 & -1 & -2 & 0 \\ 2 & -2 & -4 & 1 & 5 & -2 & -3 & 1 \\ 1 & -2 & -3 & 1 & 4 & -2 & -2 & 1 \\ 1 & -2 & -2 & 1 & 3 & -2 & -1 & 0 \\ 0 & -2 & -1 & 1 & 2 & -1 & -1 & 0 \\ 0 & -1 & 0 & 0 & 1 & 0 & -1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & -1 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & -1 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & -1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & -1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & -1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & -1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \\
\begin{pmatrix} 0 & -1 & 0 & 1 & 0 & 0 & 0 & -2 \\ 1 & -1 & -1 & 1 & 0 & 1 & 0 & -3 \\ 0 & -2 & -1 & 2 & 0 & 1 & 0 & -4 \\ 1 & -3 & -2 & 3 & 0 & 1 & 1 & -6 \\ 1 & -2 & -2 & 2 & 1 & 0 & 1 & -5 \\ 1 & -2 & -1 & 1 & 1 & 0 & 1 & -4 \\ 0 & -1 & 0 & 0 & 1 & 0 & 1 & -3 \\ 0 & -1 & 0 & 0 & 1 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 1 & -2 & 2 & 0 & -1 & 1 \\ -1 & 0 & 1 & -2 & 2 & 1 & -2 & 2 \\ -1 & 0 & 2 & -3 & 3 & 1 & -3 & 2 \\ -1 & 0 & 2 & -4 & 4 & 2 & -5 & 4 \\ -1 & -1 & 2 & -3 & 3 & 2 & -4 & 3 \\ 0 & -1 & 1 & -2 & 2 & 2 & -3 & 2 \\ 0 & -1 & 1 & -1 & 1 & 1 & -2 & 2 \\ 0 & 0 & 1 & -1 & 0 & 1 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 1 & 1 & -2 & 1 & 0 & -1 & 0 & 1 \\ 1 & 1 & -2 & 1 & 1 & -3 & 1 & 1 \\ 2 & 1 & -3 & 2 & 0 & -3 & 1 & 2 \\ 2 & 1 & -4 & 3 & 1 & -5 & 1 & 3 \\ 1 & 1 & -3 & 2 & 1 & -4 & 1 & 3 \\ 0 & 1 & -2 & 2 & 0 & -3 & 1 & 2 \\ 0 & 0 & -2 & 2 & 0 & -2 & 1 & 1 \\ 0 & 0 & -1 & 1 & 0 & -1 & 0 & 1 \end{pmatrix},$$

$$\begin{pmatrix} 0 & 0 & 1 & 0 & -2 & 1 & 1 & 0 \\ -1 & 1 & 2 & 0 & -3 & 1 & 1 & 0 \\ -1 & 1 & 3 & -1 & -3 & 1 & 2 & 0 \\ -2 & 2 & 4 & -1 & -5 & 2 & 3 & -1 \\ -1 & 2 & 3 & -1 & -4 & 2 & 2 & -1 \\ -1 & 2 & 2 & -1 & -3 & 2 & 1 & 0 \\ 0 & 2 & 1 & -1 & -2 & 1 & 1 & 0 \\ 0 & 1 & 0 & 0 & -1 & 0 & 1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 1 & 0 & 0 & 1 & -1 & 0 & -1 \\ -1 & 2 & 0 & 0 & 1 & -2 & 0 & 0 \\ -2 & 3 & 0 & 0 & 1 & -2 & 0 & -1 \\ -2 & 5 & 0 & -1 & 2 & -3 & 0 & -1 \\ -2 & 4 & 0 & -1 & 2 & -2 & -1 & 0 \\ -2 & 3 & 1 & -1 & 1 & -1 & -1 & 0 \\ -1 & 2 & 1 & -1 & 1 & -1 & -1 & 0 \\ -1 & 1 & 1 & -1 & 1 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 2 & -1 & 1 & -1 & 0 & 1 \\ -1 & -1 & 2 & -1 & 1 & -2 & 1 & 1 \\ -2 & -2 & 3 & -1 & 2 & -3 & 1 & 1 \\ -3 & -3 & 4 & -1 & 2 & -4 & 2 & 2 \\ -3 & -2 & 4 & -1 & 1 & -3 & 2 & 1 \\ -2 & -1 & 3 & -1 & 1 & -3 & 2 & 1 \\ -1 & -1 & 2 & -1 & 1 & -2 & 2 & 0 \\ 0 & -1 & 1 & 0 & 0 & -1 & 1 & 0 \end{pmatrix}, \\
\begin{pmatrix} 2 & 0 & 0 & 0 & -1 & 0 & 1 & -1 \\ 3 & -1 & -1 & 1 & -1 & 0 & 1 & -2 \\ 4 & -1 & 0 & 0 & -1 & 0 & 1 & -2 \\ 6 & -1 & -1 & 1 & -2 & 0 & 1 & -3 \\ 5 & -1 & -1 & 1 & -1 & -1 & 1 & -2 \\ 4 & -1 & -1 & 1 & -1 & -1 & 1 & -1 \\ 3 & -1 & -1 & 1 & -1 & 0 & 0 & 0 \\ 2 & 0 & -1 & 0 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 0 & 1 & -2 & 2 & -1 & 0 \\ -2 & 0 & 1 & 1 & -3 & 3 & -1 & 0 \\ -2 & 0 & 0 & 2 & -4 & 4 & -2 & 1 \\ -3 & -1 & 1 & 3 & -6 & 6 & -3 & 1 \\ -2 & -1 & 0 & 3 & -5 & 5 & -2 & 0 \\ -2 & -1 & 0 & 2 & -3 & 4 & -2 & 0 \\ -2 & -1 & 0 & 2 & -2 & 2 & -1 & 0 \\ -1 & 0 & 0 & 1 & -1 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & -2 & 0 & 1 & 0 & 0 & 1 \\ 1 & 0 & -2 & -1 & 2 & 1 & -1 & 1 \\ 2 & 0 & -3 & -1 & 2 & 1 & 0 & 1 \\ 2 & 0 & -4 & -2 & 4 & 1 & 0 & 1 \\ 2 & 0 & -3 & -2 & 3 & 1 & 0 & 1 \\ 2 & 0 & -3 & -1 & 2 & 1 & 0 & 0 \\ 1 & 1 & -2 & -1 & 1 & 1 & 0 & 0 \\ 0 & 0 & -1 & 0 & 0 & 1 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 0 & 1 & -1 & 0 & 1 & -2 & 1 & 1 \\ -1 & 1 & -2 & 1 & 1 & -2 & 1 & 1 \\ -1 & 2 & -2 & 1 & 1 & -3 & 1 & 2 \\ -1 & 2 & -4 & 2 & 2 & -4 & 1 & 3 \\ -1 & 1 & -3 & 2 & 1 & -3 & 1 & 3 \\ 0 & 1 & -3 & 2 & 0 & -2 & 1 & 2 \\ 0 & 0 & -2 & 2 & 0 & -2 & 1 & 1 \\ 0 & 0 & -1 & 1 & 0 & -1 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 0 & 1 & -1 & 0 & 0 & 0 \\ -1 & -1 & 1 & 1 & -1 & 0 & -1 & 0 \\ -1 & -1 & 1 & 1 & -1 & -1 & 0 & 0 \\ -2 & -1 & 2 & 1 & -2 & 0 & -1 & 0 \\ -1 & 0 & 1 & 1 & -2 & 0 & -1 & 0 \\ -1 & 0 & 0 & 1 & -1 & 0 & -1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & -1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & -1 & 0 & 1 & 0 & 0 & -2 \\ 1 & 0 & 0 & -1 & 2 & -1 & 1 & -3 \\ 2 & -1 & -1 & 0 & 2 & -1 & 1 & -4 \\ 2 & -1 & -1 & 0 & 3 & -2 & 2 & -6 \\ 1 & -1 & -1 & 0 & 3 & -2 & 2 & -5 \\ 0 & -1 & 0 & 0 & 2 & -1 & 1 & -4 \\ 0 & -1 & 0 & 0 & 1 & 0 & 1 & -3 \\ 0 & -1 & 0 & 0 & 1 & 0 & 0 & -1 \end{pmatrix}, \\
\begin{pmatrix} 0 & 1 & 1 & 0 & -2 & 1 & 0 & 0 \\ 1 & 2 & 0 & 0 & -3 & 2 & 0 & 0 \\ 0 & 2 & 1 & 0 & -4 & 3 & 0 & 0 \\ 1 & 3 & 1 & 0 & -6 & 4 & 1 & -1 \\ 1 & 3 & 1 & -1 & -4 & 3 & 1 & -1 \\ 1 & 2 & 1 & -1 & -3 & 2 & 1 & 0 \\ 0 & 2 & 1 & -1 & -2 & 1 & 1 & 0 \\ 0 & 1 & 0 & 0 & -1 & 0 & 1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 1 & -1 & 1 & 1 & -1 & 1 \\ 0 & -2 & 1 & -1 & 1 & 1 & -1 & 2 \\ 0 & -2 & 1 & -2 & 2 & 2 & -2 & 2 \\ 0 & -3 & 2 & -3 & 3 & 2 & -3 & 4 \\ 0 & -3 & 2 & -2 & 2 & 2 & -3 & 3 \\ 0 & -2 & 2 & -2 & 2 & 1 & -2 & 2 \\ 0 & -1 & 1 & -1 & 1 & 1 & -2 & 2 \\ 0 & 0 & 1 & -1 & 0 & 1 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 1 & 0 & -1 & 2 & -1 & -1 \\ 1 & -1 & 2 & -1 & -1 & 2 & -1 & -1 \\ 1 & -2 & 2 & -1 & -1 & 3 & -1 & -2 \\ 1 & -2 & 4 & -2 & -2 & 4 & -1 & -3 \\ 1 & -1 & 3 & -2 & -1 & 3 & -1 & -3 \\ 0 & -1 & 3 & -2 & 0 & 2 & -1 & -2 \\ 0 & 0 & 2 & -2 & 0 & 2 & -1 & -1 \\ 0 & 0 & 1 & -1 & 0 & 1 & 0 & -1 \end{pmatrix}, \\
\begin{pmatrix} 0 & 1 & 0 & -1 & 1 & 0 & 0 & 0 \\ 1 & 1 & -1 & -1 & 1 & 0 & 1 & 0 \\ 1 & 1 & -1 & -1 & 1 & 1 & 0 & 0 \\ 2 & 1 & -2 & -1 & 2 & 0 & 1 & 0 \\ 1 & 0 & -1 & -1 & 2 & 0 & 1 & 0 \\ 1 & 0 & 0 & -1 & 1 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 1 & 0 & -1 & 0 & 0 & 2 \\ -1 & 0 & 0 & 1 & -2 & 1 & -1 & 3 \\ -2 & 1 & 1 & 0 & -2 & 1 & -1 & 4 \\ -2 & 1 & 1 & 0 & -3 & 2 & -2 & 6 \\ -1 & 1 & 1 & 0 & -3 & 2 & -2 & 5 \\ 0 & 1 & 0 & 0 & -2 & 1 & -1 & 4 \\ 0 & 1 & 0 & 0 & -1 & 0 & -1 & 3 \\ 0 & 1 & 0 & 0 & -1 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & -1 & -1 & 0 & 2 & -1 & 0 & 0 \\ -1 & -2 & 0 & 0 & 3 & -2 & 0 & 0 \\ 0 & -2 & -1 & 0 & 4 & -3 & 0 & 0 \\ -1 & -3 & -1 & 0 & 6 & -4 & -1 & 1 \\ -1 & -3 & -1 & 1 & 4 & -3 & -1 & 1 \\ -1 & -2 & -1 & 1 & 3 & -2 & -1 & 0 \\ 0 & -2 & -1 & 1 & 2 & -1 & -1 & 0 \\ 0 & -1 & 0 & 0 & 1 & 0 & -1 & 0 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} 1 & 1 & -1 & 1 & -1 & -1 & 1 & -1 \\ 0 & 2 & -1 & 1 & -1 & -1 & 1 & -2 \\ 0 & 2 & -1 & 2 & -2 & -2 & 2 & -2 \\ 0 & 3 & -2 & 3 & -3 & -2 & 3 & -4 \\ 0 & 3 & -2 & 2 & -2 & -2 & 3 & -3 \\ 0 & 2 & -2 & 2 & -2 & -1 & 2 & -2 \\ 0 & 1 & -1 & 1 & -1 & -1 & 2 & -2 \\ 0 & 0 & -1 & 1 & 0 & -1 & 1 & -1 \end{pmatrix}, \begin{pmatrix} -1 & -2 & 0 & 1 & 1 & -1 & 0 & 0 \\ -1 & -3 & -1 & 2 & 1 & 0 & -1 & 0 \\ -2 & -3 & -1 & 2 & 2 & -1 & -1 & 0 \\ -2 & -5 & -2 & 3 & 3 & -1 & -2 & 1 \\ -1 & -4 & -2 & 3 & 2 & -1 & -2 & 1 \\ 0 & -3 & -2 & 2 & 2 & -1 & -1 & 0 \\ 0 & -2 & -1 & 1 & 2 & -1 & -1 & 0 \\ 0 & -1 & 0 & 0 & 1 & 0 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 1 & -1 & 0 & 1 & -1 & -1 \\ 0 & 1 & 2 & -2 & 0 & 2 & -2 & -1 \\ 0 & 0 & 3 & -2 & 0 & 2 & -2 & -2 \\ 0 & 1 & 4 & -3 & -1 & 4 & -3 & -3 \\ 0 & 1 & 3 & -3 & 0 & 3 & -2 & -3 \\ 0 & 0 & 2 & -2 & 0 & 3 & -2 & -2 \\ 0 & 0 & 2 & -2 & 0 & 2 & -1 & -1 \\ 0 & 0 & 1 & -1 & 0 & 1 & 0 & -1 \end{pmatrix}, \\
\begin{pmatrix} 0 & 0 & 0 & -1 & 1 & 0 & 1 & 0 \\ -1 & 0 & 1 & -1 & 1 & -1 & 2 & 0 \\ 0 & 0 & 1 & -2 & 2 & -1 & 2 & 0 \\ -1 & 0 & 1 & -2 & 3 & -2 & 3 & 0 \\ -1 & -1 & 1 & -1 & 2 & -1 & 2 & 0 \\ -1 & 0 & 1 & -1 & 1 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 2 & -1 & 0 & 0 & -1 & 1 & -1 \\ 1 & 2 & -2 & 0 & 0 & -1 & 2 & -2 \\ 1 & 3 & -3 & 1 & -1 & -1 & 2 & -2 \\ 2 & 4 & -4 & 1 & -1 & -2 & 4 & -4 \\ 1 & 3 & -3 & 1 & -1 & -2 & 4 & -3 \\ 1 & 2 & -2 & 1 & -1 & -2 & 3 & -2 \\ 0 & 1 & -1 & 1 & -1 & -1 & 2 & -2 \\ 0 & 0 & -1 & 1 & 0 & -1 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 0 & 1 & -2 & 1 & -1 & 2 \\ 1 & 0 & 0 & 1 & -2 & 0 & -1 & 3 \\ 1 & 0 & 0 & 1 & -3 & 1 & -1 & 4 \\ 1 & 0 & 1 & 1 & -4 & 1 & -2 & 6 \\ 1 & 1 & 1 & 0 & -3 & 1 & -2 & 5 \\ 0 & 1 & 1 & 0 & -2 & 0 & -1 & 4 \\ 0 & 1 & 0 & 0 & -1 & 0 & -1 & 3 \\ 0 & 1 & 0 & 0 & -1 & 0 & 0 & 1 \end{pmatrix}, \\
\begin{pmatrix} 1 & 2 & 0 & -1 & -1 & 1 & 0 & 0 \\ 1 & 3 & 1 & -2 & -1 & 0 & 1 & 0 \\ 2 & 3 & 1 & -2 & -2 & 1 & 1 & 0 \\ 2 & 5 & 2 & -3 & -3 & 1 & 2 & -1 \\ 1 & 4 & 2 & -3 & -2 & 1 & 2 & -1 \\ 0 & 3 & 2 & -2 & -2 & 1 & 1 & 0 \\ 0 & 2 & 1 & -1 & -2 & 1 & 1 & 0 \\ 0 & 1 & 0 & 0 & -1 & 0 & 1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 0 & -1 & 1 & 0 & -1 & 1 & 1 \\ 0 & -1 & -2 & 2 & 0 & -2 & 2 & 1 \\ 0 & 0 & -3 & 2 & 0 & -2 & 2 & 2 \\ 0 & -1 & -4 & 3 & 1 & -4 & 3 & 3 \\ 0 & -1 & -3 & 3 & 0 & -3 & 2 & 3 \\ 0 & 0 & -2 & 2 & 0 & -3 & 2 & 2 \\ 0 & 0 & -2 & 2 & 0 & -2 & 1 & 1 \\ 0 & 0 & -1 & 1 & 0 & -1 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 0 & 1 & -1 & 0 & -1 & 0 \\ 1 & 0 & -1 & 1 & -1 & 1 & -2 & 0 \\ 0 & 0 & -1 & 2 & -2 & 1 & -2 & 0 \\ 1 & 0 & -1 & 2 & -3 & 2 & -3 & 0 \\ 1 & 1 & -1 & 1 & -2 & 1 & -2 & 0 \\ 1 & 0 & -1 & 1 & -1 & 0 & -1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & -1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \\
\begin{pmatrix} 0 & -2 & 1 & 0 & 0 & 1 & -1 & 1 \\ -1 & -2 & 2 & 0 & 0 & 1 & -2 & 2 \\ -1 & -3 & 3 & -1 & 1 & 1 & -2 & 2 \\ -2 & -4 & 4 & -1 & 1 & 2 & -4 & 4 \\ -1 & -3 & 3 & -1 & 1 & 2 & -4 & 3 \\ -1 & -2 & 2 & -1 & 1 & 2 & -3 & 2 \\ 0 & -1 & 1 & -1 & 1 & 1 & -2 & 2 \\ 0 & 0 & 1 & -1 & 0 & 1 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 0 & -1 & 2 & -1 & 1 & -2 \\ -1 & 0 & 0 & -1 & 2 & 0 & 1 & -3 \\ -1 & 0 & 0 & -1 & 3 & -1 & 1 & -4 \\ -1 & 0 & -1 & -1 & 4 & -1 & 2 & -6 \\ -1 & -1 & -1 & 0 & 3 & -1 & 2 & -5 \\ 0 & -1 & -1 & 0 & 2 & 0 & 1 & -4 \\ 0 & -1 & 0 & 0 & 1 & 0 & 1 & -3 \\ 0 & -1 & 0 & 0 & 1 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 1 & 0 & 1 & -1 & -1 & 1 \\ 0 & -1 & 1 & 0 & 1 & -2 & -1 & 2 \\ -1 & -1 & 1 & 0 & 2 & -3 & -1 & 2 \\ -1 & -1 & 2 & -1 & 3 & -4 & -2 & 4 \\ -1 & 0 & 2 & -1 & 2 & -3 & -2 & 3 \\ -1 & 0 & 2 & -1 & 2 & -3 & -1 & 2 \\ 0 & 0 & 1 & -1 & 2 & -2 & -1 & 1 \\ 0 & 0 & 1 & -1 & 1 & -1 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 1 & 0 & 1 & -1 & 0 & 0 & 1 & -2 \\ 2 & 0 & 0 & -1 & 0 & 0 & 2 & -3 \\ 2 & -1 & 1 & -1 & 0 & 0 & 2 & -4 \\ 3 & -1 & 1 & -1 & -1 & 0 & 4 & -6 \\ 2 & -1 & 1 & -1 & 0 & -1 & 4 & -5 \\ 2 & -1 & 1 & -1 & 0 & -1 & 3 & -3 \\ 1 & -1 & 1 & -1 & 0 & 0 & 2 & -2 \\ 1 & -1 & 0 & 0 & 0 & 0 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 1 & -1 & -1 & 0 & 1 & 0 & 0 & 1 \\ 1 & -2 & -2 & 1 & 1 & 1 & -1 & 1 \\ 2 & -2 & -2 & 0 & 2 & 1 & -1 & 1 \\ 3 & -3 & -4 & 1 & 3 & 1 & -2 & 2 \\ 3 & -3 & -3 & 1 & 2 & 1 & -2 & 2 \\ 3 & -2 & -3 & 1 & 1 & 1 & -1 & 1 \\ 2 & -1 & -2 & 1 & 0 & 1 & -1 & 1 \\ 1 & 0 & -1 & 0 & 0 & 1 & -1 & 1 \end{pmatrix}, \begin{pmatrix} -1 & 1 & -1 & 1 & 0 & -1 & 1 & -1 \\ -2 & 1 & 0 & 1 & 0 & -2 & 2 & -1 \\ -2 & 2 & -1 & 2 & -1 & -2 & 2 & -1 \\ -3 & 2 & -1 & 3 & -1 & -3 & 3 & -2 \\ -3 & 1 & -1 & 3 & -1 & -2 & 2 & -1 \\ -3 & 1 & 0 & 2 & -1 & -1 & 1 & -1 \\ -2 & 0 & 0 & 2 & -1 & -1 & 1 & -1 \\ -1 & 0 & 0 & 1 & 0 & -1 & 0 & 0 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} 0 & 1 & 0 & 0 & -2 & 2 & -1 & 1 \\ -1 & 2 & 1 & -1 & -2 & 3 & -2 & 1 \\ -1 & 2 & 1 & -1 & -3 & 4 & -2 & 2 \\ -2 & 3 & 2 & -2 & -4 & 6 & -3 & 2 \\ -1 & 3 & 1 & -2 & -3 & 5 & -2 & 1 \\ -1 & 2 & 0 & -1 & -2 & 4 & -2 & 1 \\ -1 & 2 & 0 & -1 & -1 & 2 & -1 & 1 \\ -1 & 1 & 0 & 0 & -1 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 1 & -1 & 0 & -1 & 1 & 1 & -1 \\ 0 & 1 & -1 & 0 & -1 & 2 & 1 & -2 \\ 1 & 1 & -1 & 0 & -2 & 3 & 1 & -2 \\ 1 & 1 & -2 & 1 & -3 & 4 & 2 & -4 \\ 1 & 0 & -2 & 1 & -2 & 3 & 2 & -3 \\ 1 & 0 & -2 & 1 & -2 & 3 & 1 & -2 \\ 0 & 0 & -1 & 1 & -2 & 2 & 1 & -1 \\ 0 & 0 & -1 & 1 & -1 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 0 & -1 & 1 & 0 & 0 & -1 & 2 \\ -2 & 0 & 0 & 1 & 0 & 0 & -2 & 3 \\ -2 & 1 & -1 & 1 & 0 & 0 & -2 & 4 \\ -3 & 1 & -1 & 1 & 1 & 0 & -4 & 6 \\ -2 & 1 & -1 & 1 & 0 & 1 & -4 & 5 \\ -2 & 1 & -1 & 1 & 0 & 1 & -3 & 3 \\ -1 & 1 & -1 & 1 & 0 & 0 & -2 & 2 \\ -1 & 1 & 0 & 0 & 0 & 0 & -1 & 1 \end{pmatrix}, \\
\begin{pmatrix} -1 & 1 & 1 & 0 & -1 & 0 & 0 & -1 \\ -1 & 2 & 2 & -1 & -1 & -1 & 1 & -1 \\ -2 & 2 & 2 & 0 & -2 & -1 & 1 & -1 \\ -3 & 3 & 4 & -1 & -3 & -1 & 2 & -2 \\ -3 & 3 & 3 & -1 & -2 & -1 & 2 & -2 \\ -3 & 2 & 3 & -1 & -1 & -1 & 1 & -1 \\ -2 & 1 & 2 & -1 & 0 & -1 & 1 & -1 \\ -1 & 0 & 1 & 0 & 0 & -1 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 1 & -1 & 1 & -1 & 0 & 1 & -1 & 1 \\ 2 & -1 & 0 & -1 & 0 & 2 & -2 & 1 \\ 2 & -2 & 1 & -2 & 1 & 2 & -2 & 1 \\ 3 & -2 & 1 & -3 & 1 & 3 & -3 & 2 \\ 3 & -1 & 1 & -3 & 1 & 2 & -2 & 1 \\ 3 & -1 & 0 & -2 & 1 & 1 & -1 & 1 \\ 2 & 0 & 0 & -2 & 1 & 1 & -1 & 1 \\ 1 & 0 & 0 & -1 & 0 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 0 & 0 & 2 & -2 & 1 & -1 \\ 1 & -2 & -1 & 1 & 2 & -3 & 2 & -1 \\ 1 & -2 & -1 & 1 & 3 & -4 & 2 & -2 \\ 2 & -3 & -2 & 2 & 4 & -6 & 3 & -2 \\ 1 & -3 & -1 & 2 & 3 & -5 & 2 & -1 \\ 1 & -2 & 0 & 1 & 2 & -4 & 2 & -1 \\ 1 & -2 & 0 & 1 & 1 & -2 & 1 & -1 \\ 1 & -1 & 0 & 0 & 1 & -1 & 0 & 0 \end{pmatrix}.$$

The character table of G^{s_4} :

	10										20													
$\chi_4^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
$\chi_4^{(2)}$	1	A	B	/A	/B	1	A	B	/A	/B	1	A	B	/A	/B	/B	/A	1	B	A	/B	/A	1	B
$\chi_4^{(3)}$	1	B	/A	/B	A	1	B	/A	/B	A	1	B	/A	/B	A	A	/B	1	/A	B	A	/B	1	/A
$\chi_4^{(4)}$	1	/B	A	B	/A	1	/B	A	B	/A	1	/B	A	B	/A	/A	B	1	A	/B	/A	B	1	A
$\chi_4^{(5)}$	1	/A	/B	A	B	1	/A	/B	A	B	1	/A	/B	A	B	B	A	1	/B	/A	B	A	1	/B
$\chi_4^{(6)}$	2	2	2	2	2	-2	-2	-2	-2	-2	.	.	.	.	.	M	M	M	M	M	-M	-M	-M	-M
$\chi_4^{(7)}$	2	2	2	2	2	-2	-2	-2	-2	-2	.	.	.	.	.	*M	*M	*M	*M	*M	-*M	-*M	-*M	-*M
$\chi_4^{(8)}$	2	C	D	/C	/D	-2	-C	-D	-/C	-/D	.	.	.	.	.	N	/Q	M	/N	Q	-N	-/Q	-M	-/N
$\chi_4^{(9)}$	2	D	/C	/D	C	-2	-D	-/C	-/D	-C	.	.	.	.	.	O	P	*M	/O	/P	-O	-P	-*M	-/O
$\chi_4^{(10)}$	2	/D	C	D	/C	-2	-/D	-C	-D	-/C	.	.	.	.	.	/O	/P	*M	O	P	-/O	-/P	-*M	-O
$\chi_4^{(11)}$	2	/C	/D	C	D	-2	-/C	-D	-C	-D	.	.	.	.	.	/N	Q	M	N	/Q	-/N	-Q	-M	-N
$\chi_4^{(12)}$	2	C	D	/C	/D	-2	-C	-D	-/C	-/D	.	.	.	.	.	P	/O	*M	/P	O	-P	-/O	-*M	-/P
$\chi_4^{(13)}$	2	D	/C	/D	C	-2	-D	-/C	-/D	-C	.	.	.	.	.	Q	N	M	/Q	/N	-Q	-N	-M	-/Q
$\chi_4^{(14)}$	2	/D	C	D	/C	-2	-/D	-C	-D	-/C	.	.	.	.	.	/Q	/N	M	Q	N	-/Q	-/N	-M	-Q
$\chi_4^{(15)}$	2	/C	/D	C	D	-2	-/C	-D	-C	-D	.	.	.	.	.	/P	O	*M	P	/O	-/P	-O	-*M	-P
$\chi_4^{(16)}$	3	3	3	3	3	3	3	3	3	3	-1	-1	-1	-1	-1	*M	*M	*M	*M	*M	*M	*M	*M	*M
$\chi_4^{(17)}$	3	3	3	3	3	3	3	3	3	3	-1	-1	-1	-1	-1	M	M	M	M	M	M	M	M	M
$\chi_4^{(18)}$	3	E	F	/E	/F	3	E	F	/E	/F	-1	-A	-B	-/A	-/B	N	/Q	M	/N	Q	N	/Q	M	/N
$\chi_4^{(19)}$	3	F	/E	/F	E	3	F	/E	/F	E	-1	-B	-/A	-/B	-A	O	P	*M	/O	/P	O	P	*M	/O
$\chi_4^{(20)}$	3	/F	E	F	/E	3	/F	E	F	/E	-1	-/B	-A	-B	-/A	/O	/P	*M	O	P	/O	/P	*M	O
$\chi_4^{(21)}$	3	/E	/F	E	F	3	/E	/F	E	F	-1	-/A	-/B	-A	-B	/N	Q	M	N	/Q	/N	Q	M	N
$\chi_4^{(22)}$	3	E	F	/E	/F	3	E	F	/E	/F	-1	-A	-B	-/A	-/B	P	/O	*M	/P	O	P	/O	*M	/P
$\chi_4^{(23)}$	3	F	/E	/F	E	3	F	/E	/F	E	-1	-B	-/A	-/B	-A	Q	N	M	/Q	/N	Q	N	M	/Q
$\chi_4^{(24)}$	3	/F	E	F	/E	3	/F	E	F	/E	-1	-/B	-A	-B	-/A	/Q	/N	M	Q	N	/Q	/N	M	Q
$\chi_4^{(25)}$	3	/E	/F	E	F	3	/E	/F	E	F	-1	-/A	-/B	-A	-B	/P	O	*M	P	/O	/P	O	*M	P
$\chi_4^{(26)}$	4	4	4	4	4	4	4	4	4	4	.	.	.	.	.	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_4^{(27)}$	4	4	4	4	4	-4	-4	-4	-4	-4	.	.	.	.	.	1	1	1	1	1	-1	-1	-1	-1
$\chi_4^{(28)}$	4	G	H	/G	/H	4	G	H	/G	/H	.	.	.	.	.	-/B	-/A	-1	-B	-A	-/B	-/A	-1	-B
$\chi_4^{(29)}$	4	H	/G	/H	G	4	H	/G	/H	G	.	.	.	.	.	-A	-/B	-1	-/A	-B	-A	-/B	-1	-/A
$\chi_4^{(30)}$	4	/H	G	H	/G	4	/H	G	H	/G	.	.	.	.	.	-/A	-B	-1	-A	-/B	-/A	-B	-1	-A
$\chi_4^{(31)}$	4	/G	/H	G	H	4	/G	/H	G	H	.	.	.	.	.	-B	-A	-1	-/B	-/A	-B	-A	-1	-/B
$\chi_4^{(32)}$	4	G	H	/G	/H	-4	-G	-H	-/G	-/H	.	.	.	.	.	/B	/A	1	B	A	-/B	-/A	-1	-B
$\chi_4^{(33)}$	4	H	/G	/H	G	-4	-H	-/G	-/H	-G	.	.	.	.	.	A	/B	1	/A	B	-A	-/B	-1	-/A
$\chi_4^{(34)}$	4	/H	G	H	/G	-4	-/H	-G	-H	-/G	.	.	.	.	.	/A	B	1	A	/B	-/A	-B	-1	-A
$\chi_4^{(35)}$	4	/G	/H	G	H	-4	-/G	-/H	-G	-H	.	.	.	.	.	B	A	1	/B	/A	-B	-A	-1	-/B
$\chi_4^{(36)}$	5	5	5	5	5	5	5	5	5	5	1	1	1	1	1	.	.	.	.	.	.	.	.	.
$\chi_4^{(37)}$	5	I	J	/I	/J	5	I	J	/I	/J	1	A	B	/A	/B	.	.	.	.	.	.	.	.	.
$\chi_4^{(38)}$	5	J	/I	/J	I	5	J	/I	/J	I	1	B	/A	/B	A	.	.	.	.	.	.	.	.	.
$\chi_4^{(39)}$	5	/J	I	J	/I	5	/J	I	J	/I	1	/B	A	B	/A	.	.	.	.	.	.	.	.	.
$\chi_4^{(40)}$	5	/I	/J	I	J	5	/I	/J	I	J	1	/A	/B	A	B	.	.	.	.	.	.	.	.	.
$\chi_4^{(41)}$	6	6	6	6	6	-6	-6	-6	-6	-6	.	.	.	.	.	-1	-1	-1	-1	-1	1	1	1	1
$\chi_4^{(42)}$	6	K	L	/K	/L	-6	-K	-L	-/K	-/L	.	.	.	.	.	-/B	-/A	-1	-B	-A	/B	/A	1	B
$\chi_4^{(43)}$	6	L	/K	/L	K	-6	-L	-/K	-/L	-K	.	.	.	.	.	-A	-/B	-1	-/A	-B	A	/B	1	/A
$\chi_4^{(44)}$	6	/L	K	L	/K	-6	-/L	-K	-L	-/K	.	.	.	.	.	-/A	-B	-1	-A	-/B	/A	B	1	A
$\chi_4^{(45)}$	6	/K	/L	K	L	-6	-/K	-/L	-K	-L	.	.	.	.	.	-B	-A	-1	-/B	-/A	B	A	1	/B

	30										40										
$\chi_4^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
$\chi_4^{(2)}$	A	A	B	/B	1	/A	A	B	/B	1	/A	/B	/A	1	B	A	/B	/A	1	B	A
$\chi_4^{(3)}$	B	B	/A	A	1	/B	B	/A	A	1	/B	A	/B	1	/A	B	A	/B	1	/A	B
$\chi_4^{(4)}$	/B	/B	A	/A	1	B	/B	A	/A	1	B	/A	B	1	A	/B	/A	B	1	A	/B
$\chi_4^{(5)}$	/A	/A	/B	B	1	A	/A	/B	B	1	A	B	A	1	/B	/A	B	A	1	/B	/A
$\chi_4^{(6)}$	-M	*M	*M	*M	*M	*M	*M	*M	*M	*M	*M	-1	-1	-1	-1	-1	1	1	1	1	1
$\chi_4^{(7)}$	*M	-M	-M	-M	-M	-M	M	M	M	M	M	-1	-1	-1	-1	-1	1	1	1	1	1
$\chi_4^{(8)}$	-Q	-O	-/P	-P	*M	-/O	O	/P	P	*M	/O	-/B	-/A	-1	-B	-A	/B	/A	1	B	A
$\chi_4^{(9)}$	-/P	-/N	-/Q	-Q	-M	-N	/N	/Q	Q	M	N	-A	-/B	-1	-/A	-B	A	/B	1	/A	B
$\chi_4^{(10)}$	-P	-N	-Q	-/Q	-M	-/N	N	Q	/Q	M	/N	-/A	-B	-1	-A	-/B	/A	B	1	A	/B
$\chi_4^{(11)}$	-/Q	-/O	-P	-/P	*M	-O	/O	P	/P	*M	O	-B	-A	-1	-/B	-/A	B	A	1	/B	/A
$\chi_4^{(12)}$	-O	-Q	-/N	-N	-M	-/Q	Q	/N	N	M	/Q	-/B	-/A	-1	-B	-A	/B	/A	1	B	A
$\chi_4^{(13)}$	-/N	-/P	-/O	-O	*M	-P	/P	/O	O	*M	P	-A	-/B	-1	-/A	-B	A	/B	1	/A	B
$\chi_4^{(14)}$	-N	-P	-O	-/O	*M	-/P	P	O	/O	*M	/P	-/A	-B	-1	-A	-/B	/A	B	1	A	/B
$\chi_4^{(15)}$	-/O	-/Q	-N	-/N	-M	-Q	/Q	N	/N	M	Q	-B	-A	-1	-/B	-/A	B	A	1	/B	/A
$\chi_4^{(16)}$	*M	M	M	M	M	M	M	M	M	M	M	.	.	.	.	.	.	.	.	.	.
$\chi_4^{(17)}$	M	*M	*M	*M	*M	*M	*M	*M	*M	*M	*M	.	.	.	.	.	.	.	.	.	.
$\chi_4^{(18)}$	Q	O	/P	P	*M	/O	O	/P	P	*M	/O	.	.	.	.	.	.	.	.	.	.
$\chi_4^{(19)}$	/P	/N	/Q	Q	M	N	/N	/Q	Q	M	N	.	.	.	.	.	.	.	.	.	.
$\chi_4^{(20)}$	P	N	Q	/Q	M	/N	N	Q	/Q	M	/N	.	.	.	.	.	.	.	.	.	.
$\chi_4^{(21)}$	/Q	/O	P	/P	*M	O	/O	P	/P	*M	O	.	.	.	.	.	.	.	.	.	.
$\chi_4^{(22)}$	O	Q	/N	N	M	/Q	Q	/N	N	M	/Q	.	.	.	.	.	.	.	.	.	.
$\chi_4^{(23)}$	/N	/P	/O	O	*M	P	/P	/O	O	*M	P	.	.	.	.	.	.	.	.	.	.
$\chi_4^{(24)}$	N	P	O	/O	*M	/P	P	O	/O	*M	/P	.	.	.	.	.	.	.	.	.	.
$\chi_4^{(25)}$	/O	/Q	N	/N	M	Q	/Q	N	/N	M	Q	.	.	.	.	.	.	.	.	.	.
$\chi_4^{(26)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	1
$\chi_4^{(27)}$	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1
$\chi_4^{(28)}$	-A	-A	-B	-/B	-1	-/A	-A	-B	-/B	-1	-/A	/B	/A	1	B	A	/B	/A	1	B	A
$\chi_4^{(29)}$	-B	-B	-/A	-A	-1	-/B	-B	-/A	-A	-1	-/B	A	/B	1	/A	B	A	/B	1	/A	B
$\chi_4^{(30)}$	-/B	-/B	-A	-/A	-1	-B	-/B	-A	-/A	-1	-B	/A	B	1	A	/B	/A	B	1	A	/B
$\chi_4^{(31)}$	-/A	-/A	-/B	-B	-1	-A	-/A	-/B	-B	-1	-A	B	A	1	/B	/A	B	A	1	/B	/A
$\chi_4^{(32)}$	-A	-A	-B	-/B	-1	-/A	A	B	/B	1	/A	/B	/A	1	B	A	-/B	-/A	-1	-B	-A
$\chi_4^{(33)}$	-B	-B	-/A	-A	-1	-/B	B	/A	A	1	/B	A	/B	1	/A	B	-A	-/B	-1	-/A	-B
$\chi_4^{(34)}$	-/B	-/B	-A	-/A	-1	-B	/B	A	/A	1	B	/A	B	1	A	/B	-/A	-B	-1	-A	-/B
$\chi_4^{(35)}$	-/A	-/A	-/B	-B	-1	-A	/A	/B	B	1	A	B	A	1	/B	/A	-B	-A	-1	-/B	-/A
$\chi_4^{(36)}$	.	.	.	.	.	.	.	.	.	.	.	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_4^{(37)}$	.	.	.	.	.	.	.	.	.	.	.	-/B	-/A	-1	-B	-A	-/B	-/A	-1	-B	-A
$\chi_4^{(38)}$	.	.	.	.	.	.	.	.	.	.	.	-A	-/B	-1	-/A	-B	-A	-/B	-1	-/A	-B
$\chi_4^{(39)}$	.	.	.	.	.	.	.	.	.	.	.	-/A	-B	-1	-A	-/B	-/A	-B	-1	-A	-/B
$\chi_4^{(40)}$	.	.	.	.	.	.	.	.	.	.	.	-B	-A	-1	-/B	-/A	-B	-A	-1	-/B	-/A
$\chi_4^{(41)}$	1	1	1	1	1	1	-1	-1	-1	-1	-1	.	.	.	.	.	.	.	.	.	.
$\chi_4^{(42)}$	A	A	B	/B	1	/A	-A	-B	-/B	-1	-/A	.	.	.	.	.	.	.	.	.	.
$\chi_4^{(43)}$	B	B	/A	A	1	/B	-B	-/A	-A	-1	-/B	.	.	.	.	.	.	.	.	.	.
$\chi_4^{(44)}$	/B	/B	A	/A	1	B	-/B	-A	-/A	-1	-B	.	.	.	.	.	.	.	.	.	.
$\chi_4^{(45)}$	/A	/A	/B	B	1	A	-/A	-/B	-B	-1	-A	.	.	.	.	.	.	.	.	.	.

where $A = E(5)^4, B = E(5)^3, C = 2^*E(5)^4, D = 2^*E(5)^3, E = 3^*E(5)^4, F = 3^*E(5)^3, G = 4^*E(5)^4, H = 4^*E(5)^3, I = 5^*E(5)^4, J = 5^*E(5)^3, K = 6^*E(5)^4, L = 6^*E(5)^3, M = -E(5) - E(5)^4 = (1 - ER(5))/2 = -b5, N = -E(5) - E(5)^3, O = -E(5) - E(5)^2, P = E(5) + E(5)^2 + E(5)^3, Q = E(5) + E(5)^2 + E(5)^4.$

The generators of G^{s_5} are:

$$\begin{pmatrix} 0 & 1 & -1 & 0 & -1 & 1 & 1 & -1 \\ 0 & 0 & -1 & 0 & -1 & 2 & 1 & -2 \\ 1 & 1 & -2 & 0 & -2 & 3 & 1 & -2 \\ 1 & 1 & -2 & 0 & -3 & 4 & 2 & -4 \\ 1 & 0 & -2 & 1 & -3 & 3 & 2 & -3 \\ 1 & 0 & -2 & 1 & -2 & 2 & 1 & -2 \\ 0 & 0 & -1 & 1 & -2 & 2 & 0 & -1 \\ 0 & 0 & -1 & 1 & -1 & 1 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 1 & 0 & -1 & 1 & 0 & -1 & 1 & 0 \\ 1 & -1 & 0 & 1 & 0 & -1 & 1 & 0 \\ 1 & -1 & -1 & 2 & 0 & -1 & 1 & 0 \\ 0 & 0 & 0 & 1 & 0 & -1 & 1 & 0 \\ 0 & 0 & 0 & 1 & -1 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 1 & -1 & 0 & 0 & 1 & -1 \\ 0 & 1 & 2 & -2 & 0 & 0 & 2 & -2 \\ 0 & 0 & 3 & -2 & 0 & 0 & 2 & -2 \\ 0 & 0 & 4 & -3 & 0 & 0 & 4 & -4 \\ 0 & 0 & 3 & -3 & 1 & 0 & 3 & -3 \\ 0 & 0 & 2 & -2 & 0 & 1 & 2 & -2 \\ 0 & 0 & 1 & -1 & 0 & 0 & 2 & -1 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & -1 \end{pmatrix},$$

The representatives of conjugacy classes of G^{s_5} are:

[illegible]

$$\begin{pmatrix} 1 & -1 & 0 & -1 & 2 & -1 & 0 & 1 \\ 2 & -1 & -1 & -1 & 2 & -1 & 0 & 2 \\ 2 & -1 & -1 & -2 & 4 & -2 & 0 & 2 \\ 3 & -2 & -2 & -2 & 5 & -2 & -1 & 4 \\ 2 & -1 & -1 & -2 & 4 & -2 & -1 & 4 \\ 1 & -1 & -1 & -1 & 3 & -2 & 0 & 3 \\ 1 & 0 & -1 & -1 & 2 & -1 & 0 & 2 \\ 0 & 0 & 0 & -1 & 1 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} -1 & 1 & 1 & -1 & 0 & 1 & -1 & -1 \\ -1 & 1 & 2 & -2 & 0 & 2 & -1 & -2 \\ -1 & 2 & 2 & -2 & -1 & 3 & -2 & -2 \\ -2 & 3 & 4 & -4 & -1 & 4 & -2 & -3 \\ -1 & 2 & 3 & -3 & -1 & 3 & -1 & -3 \\ 0 & 2 & 2 & -3 & 0 & 2 & -1 & -2 \\ 0 & 1 & 2 & -2 & 0 & 1 & -1 & -1 \\ 0 & 1 & 1 & -1 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & -1 & 2 & -2 & 0 & 1 & 0 \\ -1 & 0 & -1 & 3 & -2 & -1 & 1 & 0 \\ -1 & -1 & -1 & 4 & -3 & -1 & 2 & 0 \\ -1 & -1 & -2 & 6 & -4 & -2 & 3 & -1 \\ -1 & -1 & -2 & 5 & -3 & -1 & 2 & -1 \\ -1 & -1 & -1 & 4 & -3 & 0 & 1 & -1 \\ -1 & -1 & -1 & 3 & -2 & 0 & 1 & -1 \\ 0 & -1 & -1 & 2 & -1 & 0 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 1 & -1 & -2 & 1 & 0 & 1 & 0 & 0 \\ 2 & -1 & -3 & 1 & 0 & 2 & -1 & 0 \\ 2 & -1 & -4 & 1 & 1 & 2 & -1 & 0 \\ 4 & -2 & -6 & 2 & 1 & 3 & -2 & 0 \\ 3 & -2 & -5 & 2 & 1 & 2 & -2 & 1 \\ 2 & -2 & -4 & 2 & 1 & 1 & -1 & 0 \\ 1 & -1 & -3 & 2 & 0 & 1 & -1 & 0 \\ 0 & -1 & -1 & 1 & 0 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 1 & 2 & -2 & 1 & 0 & -1 & 1 \\ -2 & 1 & 3 & -2 & 0 & 1 & -1 & 1 \\ -2 & 2 & 4 & -3 & 0 & 1 & -2 & 2 \\ -4 & 2 & 6 & -4 & 0 & 2 & -3 & 3 \\ -3 & 2 & 5 & -4 & 0 & 2 & -2 & 2 \\ -2 & 2 & 3 & -3 & 0 & 2 & -2 & 2 \\ -1 & 1 & 2 & -2 & 0 & 1 & -1 & 2 \\ -1 & 1 & 1 & -1 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 0 & 1 & -1 & -1 & 1 & -1 \\ 0 & 0 & 0 & 1 & 0 & -3 & 2 & -1 \\ 0 & -1 & 0 & 2 & -1 & -3 & 3 & -2 \\ 0 & 0 & 0 & 2 & -1 & -5 & 5 & -3 \\ 0 & 0 & 0 & 2 & -1 & -4 & 4 & -3 \\ 0 & 0 & 1 & 1 & -1 & -3 & 3 & -2 \\ 0 & 0 & 1 & 0 & 0 & -2 & 2 & -2 \\ 1 & 0 & 0 & 0 & 0 & -1 & 1 & -1 \end{pmatrix}, \\
\begin{pmatrix} 1 & -1 & -2 & 2 & -1 & 0 & 1 & -1 \\ 2 & -1 & -3 & 2 & 0 & -1 & 1 & -1 \\ 2 & -2 & -4 & 3 & 0 & -1 & 2 & -2 \\ 4 & -2 & -6 & 4 & 0 & -2 & 3 & -3 \\ 3 & -2 & -5 & 4 & 0 & -2 & 2 & -2 \\ 2 & -2 & -3 & 3 & 0 & -2 & 2 & -2 \\ 1 & -1 & -2 & 2 & 0 & -1 & 1 & -2 \\ 1 & -1 & -1 & 1 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 0 & -1 & 1 & 1 & -1 & 1 \\ 0 & 0 & 0 & -1 & 0 & 3 & -2 & 1 \\ 0 & 1 & 0 & -2 & 1 & 3 & -3 & 2 \\ 0 & 0 & 0 & -2 & 1 & 5 & -5 & 3 \\ 0 & 0 & 0 & -2 & 1 & 4 & -4 & 3 \\ 0 & 0 & -1 & -1 & 1 & 3 & -3 & 2 \\ 0 & 0 & -1 & 0 & 0 & 2 & -2 & 2 \\ -1 & 0 & 0 & 0 & 0 & 1 & -1 & 1 \end{pmatrix}, \begin{pmatrix} -1 & 1 & 2 & -1 & 0 & -1 & 0 & 0 \\ -2 & 1 & 3 & -1 & 0 & -2 & 1 & 0 \\ -2 & 1 & 4 & -1 & -1 & -2 & 1 & 0 \\ -4 & 2 & 6 & -2 & -1 & -3 & 2 & 0 \\ -3 & 2 & 5 & -2 & -1 & -2 & 2 & -1 \\ -2 & 2 & 4 & -2 & -1 & -1 & 1 & 0 \\ -1 & 1 & 3 & -2 & 0 & -1 & 1 & 0 \\ 0 & 1 & 1 & -1 & 0 & -1 & 1 & 0 \end{pmatrix}, \\
\begin{pmatrix} 1 & 1 & 0 & -1 & 0 & 0 & 1 & -2 \\ 2 & 2 & -1 & -2 & 1 & 0 & 1 & -2 \\ 2 & 2 & -1 & -2 & 1 & 0 & 2 & -4 \\ 3 & 4 & -2 & -3 & 1 & 0 & 3 & -5 \\ 3 & 3 & -2 & -2 & 1 & -1 & 3 & -4 \\ 2 & 2 & -1 & -2 & 1 & -1 & 3 & -3 \\ 1 & 2 & 0 & -2 & 1 & -1 & 2 & -2 \\ 1 & 1 & 0 & -1 & 0 & 0 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 0 & -1 & -1 & 2 & -1 & 1 & -1 & 0 \\ 0 & -1 & 0 & 2 & -2 & 2 & -2 & 0 \\ 0 & -1 & -1 & 3 & -2 & 2 & -3 & 1 \\ 1 & -2 & -1 & 4 & -3 & 3 & -4 & 1 \\ 1 & -2 & -1 & 3 & -2 & 3 & -4 & 1 \\ 1 & -1 & -1 & 2 & -1 & 2 & -3 & 0 \\ 1 & -1 & -1 & 2 & -1 & 1 & -2 & 0 \\ 0 & -1 & 0 & 1 & 0 & 0 & -1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 1 & -1 & 1 & -1 & 0 & 2 \\ -2 & -1 & 1 & 0 & 1 & -2 & 1 & 2 \\ -2 & -1 & 2 & -1 & 1 & -2 & 1 & 3 \\ -4 & -2 & 3 & -1 & 2 & -3 & 1 & 4 \\ -4 & -1 & 3 & -1 & 1 & -2 & 1 & 3 \\ -3 & -1 & 2 & 0 & 0 & -1 & 0 & 3 \\ -2 & -1 & 1 & 0 & 0 & 0 & 0 & 2 \\ -1 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \\
\begin{pmatrix} 1 & -1 & -2 & 1 & 0 & 1 & 0 & 0 \\ 1 & -1 & -3 & 1 & 1 & 1 & 0 & -1 \\ 1 & -2 & -3 & 1 & 1 & 2 & 0 & -1 \\ 2 & -3 & -5 & 2 & 2 & 2 & 0 & -2 \\ 1 & -3 & -4 & 2 & 2 & 1 & 0 & -1 \\ 1 & -3 & -3 & 2 & 1 & 1 & 0 & -1 \\ 0 & -2 & -2 & 2 & 0 & 1 & 0 & -1 \\ 0 & -1 & -1 & 1 & 0 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 1 & 2 & -2 & 1 & 0 & -1 & 1 \\ -1 & 2 & 2 & -2 & 0 & 1 & -2 & 2 \\ -2 & 3 & 3 & -3 & 1 & 0 & -2 & 2 \\ -3 & 4 & 4 & -4 & 1 & 1 & -4 & 4 \\ -2 & 4 & 3 & -4 & 1 & 1 & -3 & 3 \\ -2 & 3 & 2 & -3 & 1 & 1 & -2 & 2 \\ -1 & 2 & 1 & -2 & 1 & 0 & -1 & 2 \\ -1 & 1 & 1 & -1 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 0 & 1 & -1 & -1 & 1 & -1 \\ 0 & -1 & 1 & 1 & -1 & -2 & 2 & -1 \\ 1 & -1 & 0 & 2 & -2 & -2 & 2 & -1 \\ 1 & -1 & 1 & 2 & -3 & -3 & 4 & -2 \\ 1 & -1 & 1 & 2 & -3 & -2 & 3 & -2 \\ 1 & 0 & 1 & 1 & -2 & -2 & 2 & -1 \\ 1 & 0 & 1 & 0 & -1 & -1 & 1 & -1 \\ 1 & 0 & 0 & 0 & 0 & -1 & 1 & -1 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} 1 & -1 & -2 & 2 & -1 & 0 & 1 & -1 \\ 1 & -2 & -2 & 2 & 0 & -1 & 2 & -2 \\ 2 & -3 & -3 & 3 & -1 & 0 & 2 & -2 \\ 3 & -4 & -4 & 4 & -1 & -1 & 4 & -4 \\ 2 & -4 & -3 & 4 & -1 & -1 & 3 & -3 \\ 2 & -3 & -2 & 3 & -1 & -1 & 2 & -2 \\ 1 & -2 & -1 & 2 & -1 & 0 & 1 & -2 \\ 1 & -1 & -1 & 1 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 0 & -1 & 1 & 1 & -1 & 1 \\ 0 & 1 & -1 & -1 & 1 & 2 & -2 & 1 \\ -1 & 1 & 0 & -2 & 2 & 2 & -2 & 1 \\ -1 & 1 & -1 & -2 & 3 & 3 & -4 & 2 \\ -1 & 1 & -1 & -2 & 3 & 2 & -3 & 2 \\ -1 & 0 & -1 & -1 & 2 & 2 & -2 & 1 \\ -1 & 0 & -1 & 0 & 1 & 1 & -1 & 1 \\ -1 & 0 & 0 & 0 & 0 & 1 & -1 & 1 \end{pmatrix}, \begin{pmatrix} -1 & 1 & 2 & -1 & 0 & -1 & 0 & 0 \\ -1 & 1 & 3 & -1 & -1 & -1 & 0 & 1 \\ -1 & 2 & 3 & -1 & -1 & -2 & 0 & 1 \\ -2 & 3 & 5 & -2 & -2 & -2 & 0 & 2 \\ -1 & 3 & 4 & -2 & -2 & -1 & 0 & 1 \\ -1 & 3 & 3 & -2 & -1 & -1 & 0 & 1 \\ 0 & 2 & 2 & -2 & 0 & -1 & 0 & 1 \\ 0 & 1 & 1 & -1 & 0 & -1 & 1 & 0 \end{pmatrix}, \\
\begin{pmatrix} 0 & 0 & -2 & 1 & 1 & -1 & 0 & 0 \\ 0 & 0 & -2 & 1 & 1 & -2 & 1 & 0 \\ 0 & 0 & -3 & 1 & 2 & -2 & 0 & 1 \\ 0 & 1 & -4 & 1 & 3 & -4 & 1 & 1 \\ 0 & 1 & -3 & 1 & 2 & -3 & 0 & 1 \\ 0 & 0 & -2 & 1 & 2 & -3 & 0 & 1 \\ 0 & 0 & -1 & 0 & 2 & -2 & 0 & 0 \\ 1 & 0 & -1 & 0 & 1 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 1 & 0 & -1 & -1 & 2 & -1 & 1 \\ 2 & 1 & -1 & -1 & -1 & 3 & -1 & 0 \\ 2 & 2 & 0 & -2 & -2 & 4 & -1 & 0 \\ 4 & 2 & -1 & -2 & -3 & 6 & -2 & 0 \\ 3 & 1 & -1 & -1 & -3 & 5 & -1 & 0 \\ 2 & 1 & -1 & -1 & -2 & 4 & -1 & 0 \\ 1 & 1 & -1 & 0 & -2 & 3 & -1 & 0 \\ 0 & 0 & 0 & 0 & -1 & 2 & -1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 2 & 0 & 0 & -1 & 1 & -1 \\ -2 & -1 & 3 & 0 & 0 & -1 & 0 & 0 \\ -2 & -2 & 3 & 1 & 0 & -2 & 1 & -1 \\ -4 & -3 & 5 & 1 & 0 & -2 & 1 & -1 \\ -3 & -2 & 4 & 0 & 1 & -2 & 1 & -1 \\ -2 & -1 & 3 & 0 & 0 & -1 & 1 & -1 \\ -1 & -1 & 2 & 0 & 0 & -1 & 1 & 0 \\ -1 & 0 & 1 & 0 & 0 & -1 & 1 & 0 \end{pmatrix}, \\
\begin{pmatrix} -1 & -1 & 0 & 1 & 1 & -2 & 1 & -1 \\ -2 & -1 & 1 & 1 & 1 & -3 & 1 & 0 \\ -2 & -2 & 0 & 2 & 2 & -4 & 1 & 0 \\ -4 & -2 & 1 & 2 & 3 & -6 & 2 & 0 \\ -3 & -1 & 1 & 1 & 3 & -5 & 1 & 0 \\ -2 & -1 & 1 & 1 & 2 & -4 & 1 & 0 \\ -1 & -1 & 1 & 0 & 2 & -3 & 1 & 0 \\ 0 & 0 & 0 & 0 & 1 & -2 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 1 & -2 & 0 & 0 & 1 & -1 & 1 \\ 2 & 1 & -3 & 0 & 0 & 1 & 0 & 0 \\ 2 & 2 & -3 & -1 & 0 & 2 & -1 & 1 \\ 4 & 3 & -5 & -1 & 0 & 2 & -1 & 1 \\ 3 & 2 & -4 & 0 & -1 & 2 & -1 & 1 \\ 2 & 1 & -3 & 0 & 0 & 1 & -1 & 1 \\ 1 & 1 & -2 & 0 & 0 & 1 & -1 & 0 \\ 1 & 0 & -1 & 0 & 0 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 2 & -1 & -1 & 1 & 0 & 0 \\ 0 & 0 & 2 & -1 & -1 & 2 & -1 & 0 \\ 0 & 0 & 3 & -1 & -2 & 2 & 0 & -1 \\ 0 & -1 & 4 & -1 & -3 & 4 & -1 & -1 \\ 0 & -1 & 3 & -1 & -2 & 3 & 0 & -1 \\ 0 & 0 & 2 & -1 & -2 & 3 & 0 & -1 \\ 0 & 0 & 1 & 0 & -2 & 2 & 0 & 0 \\ -1 & 0 & 1 & 0 & -1 & 1 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} -1 & 0 & 1 & -1 & 0 & 1 & 1 & -1 \\ -2 & 0 & 1 & -1 & 0 & 2 & 0 & 0 \\ -2 & 0 & 1 & -1 & 0 & 2 & 1 & -1 \\ -4 & -1 & 2 & -1 & 0 & 3 & 1 & -1 \\ -3 & -1 & 1 & -1 & 1 & 2 & 1 & -1 \\ -2 & -1 & 0 & 0 & 0 & 2 & 1 & -1 \\ -1 & -1 & 0 & 0 & 0 & 1 & 1 & 0 \\ -1 & 0 & 0 & 0 & 0 & 0 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 0 & 0 & 1 & -2 & 0 & 0 \\ 0 & 2 & 1 & -1 & 1 & -3 & 1 & 0 \\ 0 & 2 & 1 & -1 & 2 & -4 & 0 & 1 \\ 0 & 4 & 1 & -2 & 3 & -6 & 1 & 1 \\ 0 & 4 & 1 & -2 & 2 & -4 & 0 & 1 \\ 0 & 3 & 1 & -2 & 2 & -3 & 0 & 1 \\ 0 & 2 & 1 & -2 & 2 & -2 & 0 & 0 \\ 1 & 1 & 0 & -1 & 1 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & -1 & -1 & 1 & -1 & 1 & -1 & 1 \\ 2 & -2 & -2 & 2 & -1 & 1 & -1 & 0 \\ 2 & -2 & -2 & 2 & -2 & 2 & -1 & 0 \\ 4 & -3 & -3 & 3 & -3 & 3 & -2 & 0 \\ 3 & -3 & -2 & 3 & -3 & 2 & -1 & 0 \\ 2 & -2 & -1 & 2 & -2 & 1 & -1 & 0 \\ 1 & -1 & -1 & 2 & -2 & 1 & -1 & 0 \\ 0 & -1 & 0 & 1 & -1 & 1 & -1 & 0 \end{pmatrix}, \\
\begin{pmatrix} 0 & -1 & 0 & 0 & -1 & 2 & 0 & 0 \\ 0 & -2 & -1 & 1 & -1 & 3 & -1 & 0 \\ 0 & -2 & -1 & 1 & -2 & 4 & 0 & -1 \\ 0 & -4 & -1 & 2 & -3 & 6 & -1 & -1 \\ 0 & -4 & -1 & 2 & -2 & 4 & 0 & -1 \\ 0 & -3 & -1 & 2 & -2 & 3 & 0 & -1 \\ 0 & -2 & -1 & 2 & -2 & 2 & 0 & 0 \\ -1 & -1 & 0 & 1 & -1 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 1 & 1 & -1 & 1 & -1 & 1 & -1 \\ -2 & 2 & 2 & -2 & 1 & -1 & 1 & 0 \\ -2 & 2 & 2 & -2 & 2 & -2 & 1 & 0 \\ -4 & 3 & 3 & -3 & 3 & -3 & 2 & 0 \\ -3 & 3 & 2 & -3 & 3 & -2 & 1 & 0 \\ -2 & 2 & 1 & -2 & 2 & -1 & 1 & 0 \\ -1 & 1 & 1 & -2 & 2 & -1 & 1 & 0 \\ 0 & 1 & 0 & -1 & 1 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & -1 & 1 & 0 & -1 & -1 & 1 \\ 2 & 0 & -1 & 1 & 0 & -2 & 0 & 0 \\ 2 & 0 & -1 & 1 & 0 & -2 & -1 & 1 \\ 4 & 1 & -2 & 1 & 0 & -3 & -1 & 1 \\ 3 & 1 & -1 & 1 & -1 & -2 & -1 & 1 \\ 2 & 1 & 0 & 0 & 0 & -2 & -1 & 1 \\ 1 & 1 & 0 & 0 & 0 & -1 & -1 & 0 \\ 1 & 0 & 0 & 0 & 0 & 0 & -1 & 0 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} 0 & 1 & 2 & -2 & 0 & 1 & -1 & 0 \\ 0 & 1 & 2 & -2 & 0 & 2 & -2 & 0 \\ 0 & 2 & 3 & -3 & 0 & 2 & -2 & -1 \\ 0 & 2 & 4 & -4 & 0 & 4 & -4 & -1 \\ 0 & 2 & 3 & -3 & -1 & 4 & -3 & -1 \\ 0 & 2 & 2 & -3 & 0 & 3 & -2 & -1 \\ 0 & 2 & 1 & -2 & 0 & 2 & -2 & 0 \\ -1 & 1 & 1 & -1 & 0 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 0 & 2 & -1 & -1 & 1 & -1 \\ -2 & -1 & 1 & 2 & -1 & -2 & 1 & 0 \\ -2 & -2 & 0 & 4 & -2 & -2 & 1 & 0 \\ -4 & -2 & 1 & 5 & -3 & -3 & 2 & 0 \\ -3 & -2 & 1 & 4 & -2 & -3 & 2 & 0 \\ -2 & -1 & 1 & 3 & -2 & -2 & 1 & 0 \\ -1 & -1 & 1 & 2 & -2 & -1 & 1 & 0 \\ 0 & 0 & 0 & 1 & -1 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & -2 & 0 & 1 & 0 & 0 & 1 \\ 2 & 0 & -3 & 0 & 1 & 0 & 1 & 0 \\ 2 & 0 & -3 & -1 & 2 & 0 & 1 & 1 \\ 4 & 0 & -5 & -1 & 3 & -1 & 2 & 1 \\ 3 & 0 & -4 & -1 & 3 & -1 & 1 & 1 \\ 2 & -1 & -3 & 0 & 2 & -1 & 1 & 1 \\ 1 & -1 & -2 & 0 & 2 & -1 & 1 & 0 \\ 1 & -1 & -1 & 0 & 1 & 0 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 0 & 0 & -1 & 0 & 0 & 0 & 2 & -1 \\ 0 & 0 & -1 & -1 & 1 & 0 & 2 & -1 \\ 1 & 0 & -2 & -1 & 1 & 0 & 3 & -1 \\ 1 & 0 & -2 & -2 & 2 & -1 & 5 & -2 \\ 1 & -1 & -2 & -1 & 2 & -1 & 4 & -2 \\ 1 & -1 & -2 & 0 & 1 & -1 & 3 & -1 \\ 1 & -1 & -1 & 0 & 0 & 0 & 2 & -1 \\ 1 & 0 & -1 & 0 & 0 & 0 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 1 & 1 & 0 & -1 & 1 & 0 & -1 & 0 \\ 1 & 2 & 0 & -1 & 0 & 1 & -1 & -1 \\ 1 & 2 & 1 & -2 & 1 & 1 & -2 & -1 \\ 2 & 3 & 0 & -2 & 1 & 2 & -3 & -2 \\ 1 & 3 & 0 & -2 & 1 & 2 & -3 & -1 \\ 1 & 2 & 0 & -2 & 1 & 2 & -2 & -1 \\ 0 & 1 & 0 & -1 & 1 & 1 & -1 & -1 \\ 0 & 0 & 0 & 0 & 0 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 1 & 1 & -1 & 0 & -1 & 1 \\ -1 & -2 & 1 & 2 & -1 & -1 & -1 & 2 \\ -2 & -2 & 1 & 3 & -2 & -1 & -1 & 2 \\ -3 & -3 & 2 & 4 & -3 & -1 & -2 & 4 \\ -2 & -2 & 2 & 3 & -3 & -1 & -1 & 3 \\ -2 & -1 & 2 & 2 & -2 & -1 & -1 & 2 \\ -1 & 0 & 1 & 1 & -1 & -1 & -1 & 2 \\ -1 & 0 & 1 & 0 & 0 & -1 & 0 & 1 \end{pmatrix}, \\
\begin{pmatrix} -1 & -1 & 0 & 1 & -1 & 0 & 1 & 0 \\ -1 & -2 & 0 & 1 & 0 & -1 & 1 & 1 \\ -1 & -2 & -1 & 2 & -1 & -1 & 2 & 1 \\ -2 & -3 & 0 & 2 & -1 & -2 & 3 & 2 \\ -1 & -3 & 0 & 2 & -1 & -2 & 3 & 1 \\ -1 & -2 & 0 & 2 & -1 & -2 & 2 & 1 \\ 0 & -1 & 0 & 1 & -1 & -1 & 1 & 1 \\ 0 & 0 & 0 & 0 & 0 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 1 & -1 & -1 & 1 & 0 & 1 & -1 \\ 1 & 2 & -1 & -2 & 1 & 1 & 1 & -2 \\ 2 & 2 & -1 & -3 & 2 & 1 & 1 & -2 \\ 3 & 3 & -2 & -4 & 3 & 1 & 2 & -4 \\ 2 & 2 & -2 & -3 & 3 & 1 & 1 & -3 \\ 2 & 1 & -2 & -2 & 2 & 1 & 1 & -2 \\ 1 & 0 & -1 & -1 & 1 & 1 & 1 & -2 \\ 1 & 0 & -1 & 0 & 0 & 1 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 1 & 0 & 0 & 0 & -2 & 1 \\ 0 & 0 & 1 & 1 & -1 & 0 & -2 & 1 \\ -1 & 0 & 2 & 1 & -1 & 0 & -3 & 1 \\ -1 & 0 & 2 & 2 & -2 & 1 & -5 & 2 \\ -1 & 1 & 2 & 1 & -2 & 1 & -4 & 2 \\ -1 & 1 & 2 & 0 & -1 & 1 & -3 & 1 \\ -1 & 1 & 1 & 0 & 0 & 0 & -2 & 1 \\ -1 & 0 & 1 & 0 & 0 & 0 & -1 & 1 \end{pmatrix}, \\
\begin{pmatrix} -1 & 0 & 2 & 0 & -1 & -1 & 1 & 0 \\ -1 & 0 & 3 & -1 & 0 & -2 & 1 & 1 \\ -1 & 0 & 3 & 0 & -1 & -3 & 2 & 1 \\ -2 & 0 & 5 & -1 & -1 & -4 & 3 & 2 \\ -1 & 0 & 4 & -1 & -1 & -3 & 3 & 1 \\ -1 & 1 & 3 & -1 & -1 & -2 & 2 & 1 \\ 0 & 1 & 2 & -1 & -1 & -1 & 1 & 1 \\ 0 & 1 & 1 & -1 & 0 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & -1 & -2 & 1 & 1 & -1 & 1 & -1 \\ 1 & -1 & -2 & 1 & 1 & -1 & 1 & -2 \\ 2 & -2 & -3 & 1 & 2 & -1 & 1 & -2 \\ 3 & -2 & -4 & 1 & 3 & -2 & 2 & -4 \\ 2 & -2 & -3 & 1 & 3 & -2 & 1 & -3 \\ 2 & -2 & -2 & 1 & 2 & -2 & 1 & -2 \\ 1 & -2 & -1 & 1 & 1 & -1 & 1 & -2 \\ 1 & -1 & -1 & 1 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 0 & -1 & 0 & 2 & -2 & 1 \\ 0 & 1 & -1 & 0 & -1 & 3 & -2 & 1 \\ -1 & 2 & 0 & -1 & -1 & 4 & -3 & 1 \\ -1 & 2 & -1 & 0 & -2 & 6 & -5 & 2 \\ -1 & 2 & -1 & 0 & -2 & 5 & -4 & 2 \\ -1 & 1 & -1 & 0 & -1 & 4 & -3 & 1 \\ -1 & 1 & -1 & 0 & 0 & 2 & -2 & 1 \\ -1 & 0 & 0 & 0 & 0 & 1 & -1 & 1 \end{pmatrix}, \\
\begin{pmatrix} -1 & 1 & 2 & -1 & -1 & 1 & -1 & 1 \\ -1 & 1 & 2 & -1 & -1 & 1 & -1 & 2 \\ -2 & 2 & 3 & -1 & -2 & 1 & -1 & 2 \\ -3 & 2 & 4 & -1 & -3 & 2 & -2 & 4 \\ -2 & 2 & 3 & -1 & -3 & 2 & -1 & 3 \\ -2 & 2 & 2 & -1 & -2 & 2 & -1 & 2 \\ -1 & 2 & 1 & -1 & -1 & 1 & -1 & 2 \\ -1 & 1 & 1 & -1 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 0 & 1 & 0 & -2 & 2 & -1 \\ 0 & -1 & 1 & 0 & 1 & -3 & 2 & -1 \\ 1 & -2 & 0 & 1 & 1 & -4 & 3 & -1 \\ 1 & -2 & 1 & 0 & 2 & -6 & 5 & -2 \\ 1 & -2 & 1 & 0 & 2 & -5 & 4 & -2 \\ 1 & -1 & 1 & 0 & 1 & -4 & 3 & -1 \\ 1 & -1 & 1 & 0 & 0 & -2 & 2 & -1 \\ 1 & 0 & 0 & 0 & 0 & -1 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & -2 & 0 & 1 & 1 & -1 & 0 \\ 1 & 0 & -3 & 1 & 0 & 2 & -1 & -1 \\ 1 & 0 & -3 & 0 & 1 & 3 & -2 & -1 \\ 2 & 0 & -5 & 1 & 1 & 4 & -3 & -2 \\ 1 & 0 & -4 & 1 & 1 & 3 & -3 & -1 \\ 1 & -1 & -3 & 1 & 1 & 2 & -2 & -1 \\ 0 & -1 & -2 & 1 & 1 & 1 & -1 & -1 \\ 0 & -1 & -1 & 1 & 0 & 1 & -1 & 0 \end{pmatrix}$$

$$\begin{pmatrix} 0 & 1 & 1 & -1 & 0 & -1 & 2 & -1 \\ 0 & 2 & 2 & -3 & 1 & -1 & 2 & -1 \\ 1 & 2 & 2 & -3 & 1 & -2 & 3 & -1 \\ 1 & 3 & 3 & -5 & 2 & -3 & 5 & -2 \\ 1 & 2 & 2 & -4 & 2 & -2 & 4 & -2 \\ 1 & 2 & 1 & -3 & 1 & -1 & 3 & -1 \\ 1 & 1 & 1 & -2 & 0 & 0 & 2 & -1 \\ 1 & 1 & 0 & -1 & 0 & 0 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 1 & -1 & -1 & 1 & 1 & -1 & -1 & 0 \\ 1 & -1 & -1 & 2 & 0 & -1 & -1 & -1 \\ 1 & -2 & -1 & 2 & 1 & -1 & -2 & -1 \\ 2 & -2 & -2 & 3 & 1 & -1 & -3 & -2 \\ 1 & -1 & -1 & 2 & 1 & -1 & -3 & -1 \\ 1 & -1 & 0 & 1 & 1 & -1 & -2 & -1 \\ 0 & -1 & 0 & 1 & 1 & -1 & -1 & -1 \\ 0 & -1 & 0 & 1 & 0 & 0 & -1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 0 & 0 & -1 & 2 & -1 & 1 \\ -1 & -1 & -1 & 1 & -1 & 2 & -1 & 2 \\ -2 & 0 & -1 & 1 & -2 & 3 & -1 & 2 \\ -3 & -1 & -1 & 2 & -3 & 4 & -2 & 4 \\ -2 & -1 & -1 & 2 & -3 & 3 & -1 & 3 \\ -2 & -1 & -1 & 2 & -2 & 2 & -1 & 2 \\ -1 & 0 & -1 & 1 & -1 & 1 & -1 & 2 \\ -1 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \\
\begin{pmatrix} -1 & 1 & 1 & -1 & -1 & 1 & 1 & 0 \\ -1 & 1 & 1 & -2 & 0 & 1 & 1 & 1 \\ -1 & 2 & 1 & -2 & -1 & 1 & 2 & 1 \\ -2 & 2 & 2 & -3 & -1 & 1 & 3 & 2 \\ -1 & 1 & 1 & -2 & -1 & 1 & 3 & 1 \\ -1 & 1 & 0 & -1 & -1 & 1 & 2 & 1 \\ 0 & 1 & 0 & -1 & -1 & 1 & 1 & 1 \\ 0 & 1 & 0 & -1 & 0 & 0 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 0 & 0 & 1 & -2 & 1 & -1 \\ 1 & 1 & 1 & -1 & 1 & -2 & 1 & -2 \\ 2 & 0 & 1 & -1 & 2 & -3 & 1 & -2 \\ 3 & 1 & 1 & -2 & 3 & -4 & 2 & -4 \\ 2 & 1 & 1 & -2 & 3 & -3 & 1 & -3 \\ 2 & 1 & 1 & -2 & 2 & -2 & 1 & -2 \\ 1 & 0 & 1 & -1 & 1 & -1 & 1 & -2 \\ 1 & 0 & 0 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & -1 & -1 & 1 & 0 & 1 & -2 & 1 \\ 0 & -2 & -2 & 3 & -1 & 1 & -2 & 1 \\ -1 & -2 & -2 & 3 & -1 & 2 & -3 & 1 \\ -1 & -3 & -3 & 5 & -2 & 3 & -5 & 2 \\ -1 & -2 & -2 & 4 & -2 & 2 & -4 & 2 \\ -1 & -2 & -1 & 3 & -1 & 1 & -3 & 1 \\ -1 & -1 & -1 & 2 & 0 & 0 & -2 & 1 \\ -1 & -1 & 0 & 1 & 0 & 0 & -1 & 1 \end{pmatrix}, \\
\begin{pmatrix} 0 & -1 & 0 & 0 & 1 & -2 & 2 & 0 \\ 0 & -1 & -1 & 1 & 1 & -3 & 3 & 0 \\ 0 & -2 & -1 & 1 & 2 & -4 & 4 & -1 \\ 0 & -2 & -2 & 2 & 2 & -6 & 6 & -1 \\ 0 & -2 & -2 & 2 & 1 & -4 & 5 & -1 \\ 0 & -2 & -1 & 2 & 0 & -3 & 4 & -1 \\ 0 & -2 & -1 & 2 & 0 & -2 & 2 & 0 \\ 1 & -1 & -1 & 1 & 0 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 1 & -1 & -1 & 1 & 1 & -1 & -1 \\ 2 & 1 & -1 & -2 & 2 & 1 & -2 & 0 \\ 2 & 2 & -2 & -2 & 2 & 2 & -3 & 0 \\ 4 & 2 & -3 & -3 & 3 & 3 & -4 & 0 \\ 3 & 2 & -2 & -3 & 3 & 2 & -3 & 0 \\ 2 & 1 & -2 & -2 & 3 & 1 & -2 & 0 \\ 1 & 1 & -1 & -2 & 2 & 1 & -1 & 0 \\ 0 & 0 & 0 & -1 & 1 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 1 & 1 & -2 & 1 & -1 & 1 \\ -2 & 0 & 2 & 1 & -3 & 2 & -1 & 0 \\ -2 & 0 & 3 & 1 & -4 & 2 & -1 & 1 \\ -4 & 0 & 5 & 1 & -5 & 3 & -2 & 1 \\ -3 & 0 & 4 & 1 & -4 & 2 & -2 & 1 \\ -2 & 1 & 3 & 0 & -3 & 2 & -2 & 1 \\ -1 & 1 & 2 & 0 & -2 & 1 & -1 & 0 \\ -1 & 1 & 1 & 0 & -1 & 0 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} -1 & -2 & 0 & 1 & 1 & -1 & 0 & 1 \\ -2 & -3 & 1 & 1 & 1 & -1 & 1 & 0 \\ -2 & -4 & 1 & 1 & 2 & -2 & 1 & 1 \\ -4 & -6 & 2 & 2 & 2 & -2 & 1 & 1 \\ -3 & -5 & 1 & 2 & 1 & -1 & 1 & 1 \\ -2 & -4 & 1 & 2 & 0 & -1 & 1 & 1 \\ -1 & -3 & 0 & 2 & 0 & -1 & 1 & 0 \\ -1 & -1 & 0 & 1 & 0 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 2 & 0 & -2 & 1 & 0 & 0 & 0 \\ 0 & 3 & -1 & -2 & 2 & -1 & 0 & 0 \\ 0 & 4 & -1 & -3 & 2 & 0 & 0 & -1 \\ 0 & 6 & -2 & -4 & 3 & -1 & 1 & -1 \\ 0 & 5 & -1 & -4 & 3 & -1 & 1 & -1 \\ 0 & 3 & -1 & -3 & 3 & -1 & 1 & -1 \\ 0 & 2 & -1 & -2 & 2 & 0 & 0 & 0 \\ 1 & 1 & -1 & -1 & 1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 0 & 1 & -2 & 1 & 0 & -1 \\ 2 & 0 & 0 & 1 & -3 & 2 & -1 & 0 \\ 2 & 0 & 0 & 2 & -4 & 2 & -1 & 0 \\ 4 & 0 & 0 & 2 & -5 & 3 & -2 & 0 \\ 3 & 0 & 0 & 2 & -4 & 2 & -2 & 0 \\ 2 & 1 & 0 & 1 & -3 & 2 & -2 & 0 \\ 1 & 1 & 1 & 0 & -2 & 1 & -1 & 0 \\ 0 & 0 & 1 & 0 & -1 & 1 & -1 & 0 \end{pmatrix}, \\
\begin{pmatrix} 1 & 1 & 0 & -2 & 1 & 0 & 1 & -1 \\ 0 & 1 & 0 & -2 & 1 & 0 & 2 & -2 \\ 1 & 1 & 0 & -3 & 2 & 0 & 2 & -3 \\ 1 & 2 & 0 & -4 & 2 & 0 & 3 & -4 \\ 1 & 1 & 0 & -3 & 1 & 1 & 2 & -3 \\ 1 & 0 & 0 & -2 & 1 & 0 & 2 & -2 \\ 1 & 0 & -1 & -1 & 1 & 0 & 1 & -1 \\ 1 & 0 & -1 & 0 & 0 & 0 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 0 & 1 & -1 & 1 & -1 & -1 \\ 1 & 1 & -1 & 1 & -1 & 1 & -1 & -1 \\ 0 & 1 & -1 & 2 & -2 & 2 & -2 & -1 \\ 1 & 1 & -2 & 3 & -3 & 3 & -2 & -2 \\ 0 & 1 & -1 & 2 & -2 & 2 & -1 & -2 \\ 0 & 1 & -1 & 1 & -1 & 2 & -1 & -2 \\ 0 & 1 & 0 & 0 & -1 & 2 & -1 & -1 \\ 0 & 0 & 0 & 0 & 0 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 0 & 1 & 0 & -1 & 0 & 2 \\ -1 & -2 & 1 & 1 & 0 & -1 & -1 & 3 \\ -1 & -2 & 1 & 1 & 0 & -2 & 0 & 4 \\ -2 & -3 & 2 & 1 & 1 & -3 & -1 & 6 \\ -1 & -2 & 1 & 1 & 1 & -3 & -1 & 5 \\ -1 & -1 & 1 & 1 & 0 & -2 & -1 & 4 \\ -1 & -1 & 1 & 1 & 0 & -2 & 0 & 2 \\ -1 & 0 & 1 & 0 & 0 & -1 & 0 & 1 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} 0 & 0 & 0 & -1 & 1 & -1 & 1 & 1 \\ -1 & -1 & 1 & -1 & 1 & -1 & 1 & 1 \\ 0 & -1 & 1 & -2 & 2 & -2 & 2 & 1 \\ -1 & -1 & 2 & -3 & 3 & -3 & 2 & 2 \\ 0 & -1 & 1 & -2 & 2 & -2 & 1 & 2 \\ 0 & -1 & 1 & -1 & 1 & -2 & 1 & 2 \\ 0 & -1 & 0 & 0 & 1 & -2 & 1 & 1 \\ 0 & 0 & 0 & 0 & 0 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 1 & 0 & -1 & 0 & 1 & 0 & -2 \\ 1 & 2 & -1 & -1 & 0 & 1 & 1 & -3 \\ 1 & 2 & -1 & -1 & 0 & 2 & 0 & -4 \\ 2 & 3 & -2 & -1 & -1 & 3 & 1 & -6 \\ 1 & 2 & -1 & -1 & -1 & 3 & 1 & -5 \\ 1 & 1 & -1 & -1 & 0 & 2 & 1 & -4 \\ 1 & 1 & -1 & -1 & 0 & 2 & 0 & -2 \\ 1 & 0 & -1 & 0 & 0 & 1 & 0 & -1 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 0 & 2 & -1 & 0 & -1 & 1 \\ 0 & -1 & 0 & 2 & -1 & 0 & -2 & 2 \\ -1 & -1 & 0 & 3 & -2 & 0 & -2 & 3 \\ -1 & -2 & 0 & 4 & -2 & 0 & -3 & 4 \\ -1 & -1 & 0 & 3 & -1 & -1 & -2 & 3 \\ -1 & 0 & 0 & 2 & -1 & 0 & -2 & 2 \\ -1 & 0 & 1 & 1 & -1 & 0 & -1 & 1 \\ -1 & 0 & 1 & 0 & 0 & 0 & -1 & 1 \end{pmatrix}, \\
\begin{pmatrix} 0 & -1 & -2 & 2 & 0 & 0 & -1 & 1 \\ 0 & -2 & -2 & 3 & -1 & 1 & -2 & 1 \\ 0 & -2 & -3 & 3 & 0 & 1 & -3 & 2 \\ 0 & -3 & -4 & 5 & -1 & 2 & -5 & 3 \\ 0 & -2 & -3 & 4 & -1 & 1 & -4 & 3 \\ 0 & -2 & -2 & 3 & 0 & 0 & -3 & 2 \\ -1 & -1 & -1 & 2 & 0 & 0 & -2 & 1 \\ -1 & -1 & 0 & 1 & 0 & 0 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 1 & -2 & 0 & 1 & 0 & 1 \\ -1 & 1 & 1 & -2 & 0 & 1 & 1 & 1 \\ -1 & 2 & 2 & -3 & -1 & 2 & 1 & 1 \\ -2 & 2 & 3 & -4 & -1 & 2 & 2 & 2 \\ -1 & 1 & 2 & -3 & -1 & 2 & 2 & 1 \\ -1 & 1 & 1 & -2 & -1 & 2 & 1 & 1 \\ 0 & 1 & 0 & -1 & -1 & 1 & 1 & 1 \\ 0 & 1 & 0 & -1 & 0 & 0 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 1 & 0 & 0 & -1 & 1 & -2 \\ 1 & 1 & 1 & -1 & 1 & -2 & 1 & -2 \\ 1 & 0 & 1 & 0 & 1 & -3 & 2 & -3 \\ 2 & 1 & 1 & -1 & 2 & -4 & 3 & -5 \\ 1 & 1 & 1 & -1 & 2 & -3 & 2 & -4 \\ 1 & 1 & 1 & -1 & 1 & -2 & 2 & -3 \\ 1 & 0 & 1 & -1 & 1 & -1 & 1 & -2 \\ 1 & 0 & 0 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \\
\begin{pmatrix} 0 & -1 & -1 & 2 & 0 & -1 & 0 & -1 \\ 1 & -1 & -1 & 2 & 0 & -1 & -1 & -1 \\ 1 & -2 & -2 & 3 & 1 & -2 & -1 & -1 \\ 2 & -2 & -3 & 4 & 1 & -2 & -2 & -2 \\ 1 & -1 & -2 & 3 & 1 & -2 & -2 & -1 \\ 1 & -1 & -1 & 2 & 1 & -2 & -1 & -1 \\ 0 & -1 & 0 & 1 & 1 & -1 & -1 & -1 \\ 0 & -1 & 0 & 1 & 0 & 0 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 & -1 & 0 & 0 & 1 & -1 & 2 \\ -1 & -1 & -1 & 1 & -1 & 2 & -1 & 2 \\ -1 & 0 & -1 & 0 & -1 & 3 & -2 & 3 \\ -2 & -1 & -1 & 1 & -2 & 4 & -3 & 5 \\ -1 & -1 & -1 & 1 & -2 & 3 & -2 & 4 \\ -1 & -1 & -1 & 1 & -1 & 2 & -2 & 3 \\ -1 & 0 & -1 & 1 & -1 & 1 & -1 & 2 \\ -1 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 2 & -2 & 0 & 0 & 1 & -1 \\ 0 & 2 & 2 & -3 & 1 & -1 & 2 & -1 \\ 0 & 2 & 3 & -3 & 0 & -1 & 3 & -2 \\ 0 & 3 & 4 & -5 & 1 & -2 & 5 & -3 \\ 0 & 2 & 3 & -4 & 1 & -1 & 4 & -3 \\ 0 & 2 & 2 & -3 & 0 & 0 & 3 & -2 \\ 1 & 1 & 1 & -2 & 0 & 0 & 2 & -1 \\ 1 & 1 & 0 & -1 & 0 & 0 & 1 & -1 \end{pmatrix}, \\
\begin{pmatrix} 1 & 1 & -2 & 0 & 0 & 1 & 0 & -1 \\ 1 & 1 & -3 & 1 & -1 & 1 & 1 & -1 \\ 1 & 2 & -4 & 1 & -1 & 2 & 0 & -1 \\ 2 & 3 & -6 & 2 & -2 & 2 & 1 & -2 \\ 2 & 2 & -5 & 2 & -2 & 2 & 0 & -1 \\ 1 & 1 & -4 & 2 & -1 & 1 & 0 & -1 \\ 1 & 1 & -3 & 1 & 0 & 0 & 0 & 0 \\ 1 & 0 & -2 & 1 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 1 & 0 & -1 & 1 & -1 & 1 \\ 1 & 0 & 1 & -1 & 0 & 1 & -1 & 1 \\ 1 & 0 & 2 & -1 & -1 & 1 & -1 & 2 \\ 2 & -1 & 2 & -1 & -1 & 2 & -2 & 3 \\ 1 & -1 & 2 & -1 & -1 & 2 & -1 & 2 \\ 1 & 0 & 1 & -1 & -1 & 2 & -1 & 2 \\ 1 & 0 & 1 & -1 & -1 & 2 & -1 & 1 \\ 0 & 0 & 1 & -1 & 0 & 1 & -1 & 1 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 1 & 0 & 1 & -2 & 1 & 0 \\ -2 & -1 & 2 & 0 & 1 & -2 & 0 & 0 \\ -2 & -2 & 2 & 0 & 2 & -3 & 1 & -1 \\ -4 & -2 & 4 & -1 & 3 & -4 & 1 & -1 \\ -3 & -1 & 3 & -1 & 3 & -4 & 1 & -1 \\ -2 & -1 & 3 & -1 & 2 & -3 & 1 & -1 \\ -2 & -1 & 2 & 0 & 1 & -2 & 1 & -1 \\ -1 & 0 & 1 & 0 & 0 & -1 & 1 & -1 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} 0 & 0 & -1 & 0 & 1 & -1 & 1 & -1 \\ -1 & 0 & -1 & 1 & 0 & -1 & 1 & -1 \\ -1 & 0 & -2 & 1 & 1 & -1 & 1 & -2 \\ -2 & 1 & -2 & 1 & 1 & -2 & 2 & -3 \\ -1 & 1 & -2 & 1 & 1 & -2 & 1 & -2 \\ -1 & 0 & -1 & 1 & 1 & -2 & 1 & -2 \\ -1 & 0 & -1 & 1 & 1 & -2 & 1 & -1 \\ 0 & 0 & -1 & 1 & 0 & -1 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 1 & 1 & -1 & 0 & -1 & 2 & -1 & 0 \\ 2 & 1 & -2 & 0 & -1 & 2 & 0 & 0 \\ 2 & 2 & -2 & 0 & -2 & 3 & -1 & 1 \\ 4 & 2 & -4 & 1 & -3 & 4 & -1 & 1 \\ 3 & 1 & -3 & 1 & -3 & 4 & -1 & 1 \\ 2 & 1 & -3 & 1 & -2 & 3 & -1 & 1 \\ 2 & 1 & -2 & 0 & -1 & 2 & -1 & 1 \\ 1 & 0 & -1 & 0 & 0 & 1 & -1 & 1 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 2 & 0 & 0 & -1 & 0 & 1 \\ -1 & -1 & 3 & -1 & 1 & -1 & -1 & 1 \\ -1 & -2 & 4 & -1 & 1 & -2 & 0 & 1 \\ -2 & -3 & 6 & -2 & 2 & -2 & -1 & 2 \\ -2 & -2 & 5 & -2 & 2 & -2 & 0 & 1 \\ -1 & -1 & 4 & -2 & 1 & -1 & 0 & 1 \\ -1 & -1 & 3 & -1 & 0 & 0 & 0 & 0 \\ -1 & 0 & 2 & -1 & 0 & 0 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} -1 & 0 & 0 & 1 & -1 & 1 & -1 & 1 \\ -1 & -1 & 0 & 1 & -1 & 2 & -1 & 1 \\ -2 & -1 & 0 & 2 & -2 & 2 & -1 & 2 \\ -2 & -1 & 0 & 2 & -3 & 4 & -2 & 3 \\ -1 & -1 & 0 & 2 & -3 & 3 & -1 & 2 \\ -1 & -1 & 0 & 2 & -3 & 3 & -1 & 1 \\ -1 & 0 & 0 & 1 & -2 & 2 & 0 & 0 \\ -1 & 0 & 1 & 0 & -1 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 1 & -1 & 1 & -2 & 1 & 1 \\ -1 & 1 & 2 & -2 & 2 & -3 & 1 & 1 \\ 0 & 1 & 2 & -3 & 3 & -4 & 2 & 1 \\ -1 & 1 & 4 & -4 & 4 & -6 & 3 & 1 \\ -1 & 0 & 3 & -3 & 4 & -5 & 2 & 1 \\ -1 & 0 & 2 & -2 & 3 & -4 & 2 & 1 \\ 0 & 0 & 1 & -1 & 2 & -3 & 1 & 1 \\ 0 & 0 & 0 & 0 & 1 & -2 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & -1 & 0 & 0 & 1 & 0 & -2 \\ 2 & 0 & -2 & 1 & -1 & 1 & 0 & -2 \\ 2 & 0 & -2 & 1 & -1 & 2 & -1 & -3 \\ 3 & 0 & -4 & 2 & -1 & 2 & -1 & -4 \\ 2 & 1 & -3 & 1 & -1 & 2 & -1 & -3 \\ 2 & 1 & -2 & 0 & 0 & 1 & -1 & -2 \\ 1 & 0 & -1 & 0 & 0 & 1 & -1 & -1 \\ 1 & 0 & -1 & 0 & 0 & 1 & -1 & 0 \end{pmatrix}.$$

The character table of G^{s_5} :

	10										20									
$\chi_5^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_5^{(2)}$	1	A	/A	A	/A	1	/A	1	A	1	A	/A	A	/A	1	/A	1	A	/A	1
$\chi_5^{(3)}$	1	/A	A	/A	A	1	A	1	/A	1	/A	A	/A	A	1	A	1	/A	A	1
$\chi_5^{(4)}$	4	4	4	-4	-4	-4	.	.	.	-2	-2	-2	2	2	2	.	.	.	.	.
$\chi_5^{(5)}$	4	4	4	-4	-4	-4	.	.	.	-2	-2	-2	2	2	2	.	.	.	.	.
$\chi_5^{(6)}$	4	B	/B	-B	-/B	-4	.	.	.	-2	Q	/Q	-Q	-/Q	2	.	.	.	.	.
$\chi_5^{(7)}$	4	/B	B	-/B	-B	-4	.	.	.	-2	/Q	Q	-/Q	-Q	2	.	.	.	.	.
$\chi_5^{(8)}$	4	B	/B	-B	-/B	-4	.	.	.	-2	Q	/Q	-Q	-/Q	2	.	.	.	.	.
$\chi_5^{(9)}$	4	/B	B	-/B	-B	-4	.	.	.	-2	/Q	Q	-/Q	-Q	2	.	.	.	.	.
$\chi_5^{(10)}$	5	5	5	5	5	5	1	1	1	-1	-1	-1	-1	-1	1	1	1	S	S	S
$\chi_5^{(11)}$	5	5	5	5	5	5	1	1	1	-1	-1	-1	-1	-1	1	1	1	-S	-S	-S
$\chi_5^{(12)}$	5	C	/C	C	/C	5	/A	1	A	-1	-A	-/A	-A	-/A	-1	/A	1	A	S	T
$\chi_5^{(13)}$	5	/C	C	/C	C	5	A	1	/A	-1	-/A	-A	-/A	-A	-1	A	1	/A	-S	/T
$\chi_5^{(14)}$	5	C	/C	C	/C	5	/A	1	A	-1	-A	-/A	-A	-/A	-1	/A	1	A	-S	-T
$\chi_5^{(15)}$	5	/C	C	/C	C	5	A	1	/A	-1	-/A	-A	-/A	-A	-1	A	1	/A	S	-/T
$\chi_5^{(16)}$	6	6	6	6	6	6	-1	-1	-1	3	3	3	3	3	3	2	2	2	1	1
$\chi_5^{(17)}$	6	D	/D	D	/D	6	-/A	-1	-A	3	R	/R	R	/R	3	-/Q	2	-Q	1	A
$\chi_5^{(18)}$	6	/D	D	/D	D	6	-A	-1	-/A	3	/R	R	/R	R	3	-Q	2	-/Q	1	/A
$\chi_5^{(19)}$	10	10	10	10	10	10	1	1	1	1	1	1	1	1	1	-2	-2	-2	-1	-1
$\chi_5^{(20)}$	10	10	10	10	10	10	1	1	1	1	1	1	1	1	1	-2	-2	-2	-1	-1
$\chi_5^{(21)}$	10	E	/E	E	/E	10	/A	1	A	1	A	/A	A	/A	1	/Q	-2	Q	-1	-A
$\chi_5^{(22)}$	10	/E	E	/E	E	10	A	1	/A	1	/A	A	/A	A	1	Q	-2	/Q	-1	-/A
$\chi_5^{(23)}$	10	E	/E	E	/E	10	/A	1	A	1	A	/A	A	/A	1	/Q	-2	Q	-1	-A
$\chi_5^{(24)}$	10	/E	E	/E	E	10	A	1	/A	1	/A	A	/A	A	1	Q	-2	/Q	-1	-/A
$\chi_5^{(25)}$	15	15	15	15	15	15	-1	-1	-1	3	3	3	3	3	3	-1	-1	-1	-1	-1
$\chi_5^{(26)}$	15	15	15	15	15	15	.	.	.	.	.	.	.	.	.	3	3	3	-2	-2
$\chi_5^{(27)}$	15	F	/F	F	/F	15	.	.	.	.	.	.	.	.	.	/R	3	R	-2	Q
$\chi_5^{(28)}$	15	/F	F	/F	F	15	.	.	.	.	.	.	.	.	.	R	3	/R	-2	/Q
$\chi_5^{(29)}$	15	F	/F	F	/F	15	-/A	-1	-A	3	R	/R	R	/R	3	-/A	-1	-A	-1	-A
$\chi_5^{(30)}$	15	/F	F	/F	F	15	-A	-1	-/A	3	/R	R	/R	R	3	-A	-1	-/A	-1	-/A
$\chi_5^{(31)}$	20	20	20	-20	-20	-20	.	.	.	2	2	2	-2	-2	-2	.	.	.	.	.
$\chi_5^{(32)}$	20	20	20	20	20	20	1	1	1	5	5	5	5	5	5	4	4	4	1	1
$\chi_5^{(33)}$	20	20	20	-20	-20	-20	.	.	.	2	2	2	-2	-2	-2	.	.	.	.	.
$\chi_5^{(34)}$	20	20	20	-20	-20	-20	.	.	.	2	2	2	-2	-2	-2	.	.	.	.	.
$\chi_5^{(35)}$	20	20	20	-20	-20	-20	.	.	.	-4	-4	-4	4	4	4	.	.	.	.	.
$\chi_5^{(36)}$	20	20	20	-20	-20	-20	.	.	.	-4	-4	-4	4	4	4	.	.	.	.	.
$\chi_5^{(37)}$	20	G	/G	-G	-/G	-20	.	.	.	2	-Q	-/Q	Q	/Q	-2	.	.	.	.	.
$\chi_5^{(38)}$	20	/G	G	-/G	-G	-20	.	.	.	2	-/Q	-Q	/Q	Q	-2	.	.	.	.	.
$\chi_5^{(39)}$	20	G	/G	-G	-/G	-20	.	.	.	-4	-B	-/B	B	/B	4	.	.	.	.	.
$\chi_5^{(40)}$	20	/G	G	-/G	-G	-20	.	.	.	-4	-/B	-B	/B	B	4	.	.	.	.	.
$\chi_5^{(41)}$	20	G	/G	-G	-/G	-20	.	.	.	2	-Q	-/Q	Q	/Q	-2	.	.	.	.	.
$\chi_5^{(42)}$	20	/G	G	-/G	-G	-20	.	.	.	2	-/Q	-Q	/Q	Q	-2	.	.	.	.	.
$\chi_5^{(43)}$	20	G	/G	-G	-/G	-20	.	.	.	-4	-B	-/B	B	/B	4	.	.	.	.	.
$\chi_5^{(44)}$	20	/G	G	-/G	-G	-20	.	.	.	-4	-/B	-B	/B	B	4	.	.	.	.	.
$\chi_5^{(45)}$	20	G	/G	-G	-/G	-20	.	.	.	2	-Q	-/Q	Q	/Q	-2	.	.	.	.	.

	10														20													
$\chi_5^{(46)}$	20	/G	G	-/G	-G	-20	.	.	.	2	-/Q	-Q	/Q	Q	-2	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_5^{(47)}$	20	G	/G	G	/G	20	/A	1	A	5	C	/C	C	/C	5	/B	4	B	1	A	/A	1	A	/A	1	A	/A	
$\chi_5^{(48)}$	20	/G	G	/G	G	20	A	1	/A	5	/C	C	/C	C	5	B	4	/B	1	/A	A	1	/A	A	1	/A	A	
$\chi_5^{(49)}$	24	24	24	24	24	24	.	.	.	.	.	.	.	.	.	.	.	.	2	2	2	2	2	2	2	2	2
$\chi_5^{(50)}$	24	H	/H	H	/H	24	.	.	.	.	.	.	.	.	.	.	.	.	2	-Q	-/Q	2	-Q	-/Q	2	-Q	-/Q
$\chi_5^{(51)}$	24	/H	H	/H	H	24	.	.	.	.	.	.	.	.	.	.	.	.	2	-/Q	-Q	2	-/Q	-Q	2	-/Q	-Q
$\chi_5^{(52)}$	30	30	30	30	30	30	-1	-1	-1	3	3	3	3	3	3	2	2	2	-1	-1	-1	-1	-1	-1	-1	-1	-1	
$\chi_5^{(53)}$	30	30	30	30	30	30	-1	-1	-1	-3	-3	-3	-3	-3	-3	2	2	2	-S	-S	-S	S	S	S	S	S	S	
$\chi_5^{(54)}$	30	30	30	30	30	30	-1	-1	-1	-3	-3	-3	-3	-3	-3	2	2	2	S	S	S	-S	-S	-S	-S	-S	-S	
$\chi_5^{(55)}$	30	I	/I	I	/I	30	-/A	-1	-A	-3	-R	-/R	-R	-/R	-3	-/Q	2	-Q	S	T	-/T	-S	-T	/T	-S	-T	/T	
$\chi_5^{(56)}$	30	/I	I	/I	I	30	-A	-1	-/A	-3	-/R	-R	-/R	-R	-3	-Q	2	-/Q	-S	/T	-T	S	-/T	T	-S	-T	/T	
$\chi_5^{(57)}$	30	I	/I	I	/I	30	-/A	-1	-A	-3	-R	-/R	-R	-/R	-3	-/Q	2	-Q	-S	-T	/T	S	T	-/T	T	-/T	T	
$\chi_5^{(58)}$	30	/I	I	/I	I	30	-A	-1	-/A	-3	-/R	-R	-/R	-R	-3	-Q	2	-/Q	S	-/T	T	-S	/T	-T	-S	-T	/T	
$\chi_5^{(59)}$	30	I	/I	I	/I	30	-/A	-1	-A	3	R	/R	R	/R	3	-/Q	2	-Q	-1	-A	-/A	-1	-A	-/A	-1	-A	-/A	
$\chi_5^{(60)}$	30	/I	I	/I	I	30	-A	-1	-/A	3	/R	R	/R	R	3	-Q	2	-/Q	-1	-/A	-A	-1	-/A	-A	-1	-/A	-A	
$\chi_5^{(61)}$	36	36	36	-36	-36	-36	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_5^{(62)}$	36	36	36	-36	-36	-36	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_5^{(63)}$	36	J	/J	-J	-/J	-36	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_5^{(64)}$	36	/J	J	-/J	-J	-36	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_5^{(65)}$	36	J	/J	-J	-/J	-36	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_5^{(66)}$	36	/J	J	-/J	-J	-36	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_5^{(67)}$	40	40	40	40	40	40	.	.	.	-2	-2	-2	-2	-2	-2	.	.	.	Q	Q	Q	/Q	/Q	/Q	/Q	/Q	/Q	
$\chi_5^{(68)}$	40	40	40	40	40	40	.	.	.	-2	-2	-2	-2	-2	-2	.	.	.	/Q	/Q	/Q	Q	Q	Q	Q	Q	Q	
$\chi_5^{(69)}$	40	K	/K	K	/K	40	.	.	.	-2	Q	/Q	Q	/Q	-2	.	.	.	Q	/Q	-2	/Q	-2	Q	-2	Q	Q	
$\chi_5^{(70)}$	40	/K	K	/K	K	40	.	.	.	-2	/Q	Q	/Q	Q	-2	.	.	.	/Q	Q	-2	Q	-2	/Q	-2	/Q	Q	
$\chi_5^{(71)}$	40	K	/K	K	/K	40	.	.	.	-2	Q	/Q	Q	/Q	-2	.	.	.	/Q	-2	Q	Q	/Q	-2	/Q	-2	Q	
$\chi_5^{(72)}$	40	/K	K	/K	K	40	.	.	.	-2	/Q	Q	/Q	Q	-2	.	.	.	Q	-2	/Q	/Q	Q	-2	/Q	-2	Q	
$\chi_5^{(73)}$	45	45	45	45	45	45	.	.	.	.	.	.	.	.	.	-3	-3	-3	.	.	.	.	.	.	.	.	.
$\chi_5^{(74)}$	45	45	45	45	45	45	.	.	.	.	.	.	.	.	.	-3	-3	-3	.	.	.	.	.	.	.	.	.
$\chi_5^{(75)}$	45	L	/L	L	/L	45	.	.	.	.	.	.	.	.	.	-/R	-3	-R	.	.	.	.	.	.	.	.	.
$\chi_5^{(76)}$	45	/L	L	/L	L	45	.	.	.	.	.	.	.	.	.	-R	-3	-/R	.	.	.	.	.	.	.	.	.
$\chi_5^{(77)}$	45	L	/L	L	/L	45	.	.	.	.	.	.	.	.	.	-/R	-3	-R	.	.	.	.	.	.	.	.	.
$\chi_5^{(78)}$	45	/L	L	/L	L	45	.	.	.	.	.	.	.	.	.	-R	-3	-/R	.	.	.	.	.	.	.	.	.
$\chi_5^{(79)}$	60	60	60	-60	-60	-60	.	.	.	-6	-6	-6	6	6	6	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_5^{(80)}$	60	60	60	60	60	60	1	1	1	-3	-3	-3	-3	-3	-3	4	4	4	-1	-1	-1	-1	-1	-1	-1	-1	-1	
$\chi_5^{(81)}$	60	60	60	-60	-60	-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_5^{(82)}$	60	60	60	-60	-60	-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_5^{(83)}$	60	M	/M	-M	-/M	-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_5^{(84)}$	60	/M	M	-/M	-M	-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_5^{(85)}$	60	M	/M	-M	-/M	-60	.	.	.	-6	-D	-/D	D	/D	6	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_5^{(86)}$	60	/M	M	-/M	-M	-60	.	.	.	-6	-/D	-D	/D	D	6	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_5^{(87)}$	60	M	/M	-M	-/M	-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_5^{(88)}$	60	/M	M	-/M	-M	-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_5^{(89)}$	60	M	/M	M	/M	60	/A	1	A	-3	-R	-/R	-R	-/R	-3	/B	4	B	-1	-A	-/A	-1	-A	-/A	-1	-A	-/A	
$\chi_5^{(90)}$	60	/M	M	/M	M	60	A	1	/A	-3	-/R	-R	-/R	-R	-3	B	4	/B	-1	-/A	-A	-1	-/A	-A	-1	-/A	-A	

	30										40									
$\chi_5^{(23)}$	-Q	-/Q	2	2	-Q	-/Q	-Q	-/Q	2	AC	/AA	/AB	/AA	/AB	AC	/AC	AB	AA	AB	AA
$\chi_5^{(24)}$	-/Q	-Q	2	2	-/Q	-Q	-/Q	-Q	2	/AC	AA	AB	AA	AB	/AC	AC	/AB	/AA	/AB	/AA
$\chi_5^{(25)}$	-1	-1	-1	3	3	3	3	3	3	6	6	6	6	6	6	6	6	6	6	6
$\chi_5^{(26)}$	7	7	7	-1	-1	-1	-1	-1	-1	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3
$\chi_5^{(27)}$	U	/U	7	-1	-A	-/A	-A	-/A	-1	-/R	-3	-R	-3	-R	-/R	-R	-/R	-3	-/R	-3
$\chi_5^{(28)}$	/U	U	7	-1	-/A	-A	-/A	-A	-1	-R	-3	-/R	-3	-/R	-R	-/R	-R	-3	-R	-3
$\chi_5^{(29)}$	-A	-/A	-1	3	R	/R	R	/R	3	/D	6	D	6	D	/D	D	/D	6	/D	6
$\chi_5^{(30)}$	-/A	-A	-1	3	/R	R	/R	R	3	D	6	/D	6	/D	D	/D	D	6	D	6
$\chi_5^{(31)}$	.	.	.	2	2	2	-2	-2	-2	-7	-7	-7	7	7	7	-7	-7	-7	7	7
$\chi_5^{(32)}$	4	4	4	.	.	.	.	.	.	2	2	2	2	2	2	2	2	2	2	2
$\chi_5^{(33)}$	.	.	.	2	2	2	-2	-2	-2	AD	AD	AD	-AD	-AD	-AD	/AD	/AD	/AD	-/AD	-/AD
$\chi_5^{(34)}$	.	.	.	2	2	2	-2	-2	-2	/AD	/AD	/AD	-/AD	-/AD	-/AD	AD	AD	AD	-AD	-AD
$\chi_5^{(35)}$	.	.	.	2	2	2	-2	-2	-2	AE	AE	AE	-AE	-AE	-AE	/AE	/AE	/AE	-/AE	-/AE
$\chi_5^{(36)}$	.	.	.	2	2	2	-2	-2	-2	/AE	/AE	/AE	-/AE	-/AE	-/AE	AE	AE	AE	-AE	-AE
$\chi_5^{(37)}$	.	.	.	2	-Q	-/Q	Q	/Q	-2	-/U	-7	-U	7	U	/U	-U	-/U	-7	/U	7
$\chi_5^{(38)}$	.	.	.	2	-/Q	-Q	/Q	Q	-2	-U	-7	-/U	7	/U	U	-/U	-U	-7	U	7
$\chi_5^{(39)}$	.	.	.	2	-Q	-/Q	Q	/Q	-2	AF	AE	/AH	-AE	-/AH	-AF	/AF	AH	/AE	-AH	-/AE
$\chi_5^{(40)}$	.	.	.	2	-/Q	-Q	/Q	Q	-2	/AF	/AE	AH	-/AE	-AH	-/AF	AF	/AH	AE	-/AH	-AE
$\chi_5^{(41)}$	.	.	.	2	-Q	-/Q	Q	/Q	-2	AG	/AD	/AI	-/AD	-/AI	-AG	/AG	AI	AD	-AI	-AD
$\chi_5^{(42)}$	.	.	.	2	-/Q	-Q	/Q	Q	-2	/AG	AD	AI	-AD	-AI	-/AG	AG	/AI	/AD	-/AI	-/AD
$\chi_5^{(43)}$	.	.	.	2	-Q	-/Q	Q	/Q	-2	AH	/AE	/AF	-/AE	-/AF	-AH	/AH	AF	AE	-AF	-AE
$\chi_5^{(44)}$	.	.	.	2	-/Q	-Q	/Q	Q	-2	/AH	AE	AF	-AE	-AF	-/AH	AH	/AF	/AE	-/AF	-/AE
$\chi_5^{(45)}$	.	.	.	2	-Q	-/Q	Q	/Q	-2	AI	AD	/AG	-AD	-/AG	-AI	/AI	AG	/AD	-AG	-/AD
$\chi_5^{(46)}$	.	.	.	2	-/Q	-Q	/Q	Q	-2	/AI	/AD	AG	-/AD	-AG	-/AI	AI	/AG	AD	-/AG	-AD
$\chi_5^{(47)}$	B	/B	4	.	.	.	.	.	.	-/Q	2	-Q	2	-Q	-/Q	-Q	-/Q	2	-/Q	2
$\chi_5^{(48)}$	/B	B	4	.	.	.	.	.	.	-Q	2	-/Q	2	-/Q	-Q	-/Q	-Q	2	-Q	2
$\chi_5^{(49)}$	8	8	8	.	.	.	.	.	.	6	6	6	6	6	6	6	6	6	6	6
$\chi_5^{(50)}$	V	/V	8	.	.	.	.	.	.	/D	6	D	6	D	/D	D	/D	6	/D	6
$\chi_5^{(51)}$	/V	V	8	.	.	.	.	.	.	D	6	/D	6	/D	D	/D	D	6	D	6
$\chi_5^{(52)}$	-10	-10	-10	-2	-2	-2	-2	-2	-2	3	3	3	3	3	3	3	3	3	3	3
$\chi_5^{(53)}$	6	6	6	2	2	2	2	2	2	AJ	AJ	AJ	AJ	AJ	AJ	/AJ	/AJ	/AJ	/AJ	/AJ
$\chi_5^{(54)}$	6	6	6	2	2	2	2	2	2	/AJ	/AJ	/AJ	/AJ	/AJ	/AJ	AJ	AJ	AJ	AJ	AJ
$\chi_5^{(55)}$	D	/D	6	2	-Q	-/Q	-Q	-/Q	2	AK	/AJ	/AL	/AJ	/AL	AK	/AK	AL	AJ	AL	AJ
$\chi_5^{(56)}$	/D	D	6	2	-/Q	-Q	-/Q	-Q	2	/AK	AJ	AL	AJ	AL	/AK	AK	/AL	/AJ	/AL	/AJ
$\chi_5^{(57)}$	D	/D	6	2	-Q	-/Q	-Q	-/Q	2	AL	AJ	/AK	AJ	/AK	AL	/AL	AK	/AJ	AK	/AJ
$\chi_5^{(58)}$	/D	D	6	2	-/Q	-Q	-/Q	-Q	2	/AL	/AJ	AK	/AJ	AK	/AL	AL	/AK	AJ	/AK	AJ
$\chi_5^{(59)}$	-E	-/E	-10	-2	Q	/Q	Q	/Q	-2	/R	3	R	3	R	/R	R	/R	3	/R	3
$\chi_5^{(60)}$	-/E	-E	-10	-2	/Q	Q	/Q	Q	-2	R	3	/R	3	/R	R	/R	R	3	R	3
$\chi_5^{(61)}$	.	.	.	2	2	2	-2	-2	-2	/W	/W	/W	-/W	-/W	-/W	W	W	W	-W	-W
$\chi_5^{(62)}$	.	.	.	2	2	2	-2	-2	-2	W	W	W	-W	-W	-W	/W	/W	/W	-/W	-/W
$\chi_5^{(63)}$	.	.	.	2	-Q	-/Q	Q	/Q	-2	9	W	/W	-W	-/W	-9	9	W	/W	-W	-/W
$\chi_5^{(64)}$	.	.	.	2	-/Q	-Q	/Q	Q	-2	9	/W	W	-/W	-W	-9	9	/W	W	-/W	-W
$\chi_5^{(65)}$.	.	.	2	-Q	-/Q	Q	/Q	-2	W	/W	9	-/W	-9	-W	/W	9	W	-9	-W
$\chi_5^{(66)}$.	.	.	2	-/Q	-Q	/Q	Q	-2	/W	W	9	-W	-9	-/W	W	9	/W	-9	-/W
$\chi_5^{(67)}$	-8	-8	-8	AM	AM	AM	AM	AM	AM	/AM	/AM	/AM	/AM	/AM

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$\chi_5^{(68)}$	-8	-8	-8	/AM	/AM	/AM	/AM	/AM	/AM	AM	AM	AM	AM	AM
$\chi_5^{(69)}$	-V	-V	-8	AN	AM	/AO	AM	/AO	AN	/AN	AO	/AM	AO	/AM
$\chi_5^{(70)}$	-V	-V	-8	/AN	/AM	AO	/AM	AO	/AN	AN	/AO	AM	/AO	AM
$\chi_5^{(71)}$	-V	-V	-8	.	.	.	.	.	.	AO	/AM	/AN	/AM	/AN	AO	/AO	AN	AM	AN	AM
$\chi_5^{(72)}$	-V	-V	-8	.	.	.	.	.	.	/AO	AM	AN	AM	AN	/AO	AO	/AN	/AM	/AN	/AM
$\chi_5^{(73)}$	-3	-3	-3	1	1	1	1	1	1	-W	-W	-W	-W	-W	-W	-W	-W	-W	-W	-W
$\chi_5^{(74)}$	-3	-3	-3	1	1	1	1	1	1	-W	-W	-W	-W	-W	-W	-W	-W	-W	-W	-W
$\chi_5^{(75)}$	-R	-R	-3	1	A	/A	A	/A	1	-9	-W	-W	-W	-W	-9	-9	-W	-W	-W	-W
$\chi_5^{(76)}$	-R	-R	-3	1	/A	A	/A	A	1	-9	-W	-W	-W	-W	-9	-9	-W	-W	-W	-W
$\chi_5^{(77)}$	-R	-R	-3	1	A	/A	A	/A	1	-W	-W	-9	-W	-9	-W	-W	-9	-W	-9	-W
$\chi_5^{(78)}$	-R	-R	-3	1	/A	A	/A	A	1	-W	-W	-9	-W	-9	-W	-W	-9	-W	-9	-W
$\chi_5^{(79)}$	.	.	.	-2	-2	-2	2	2	2	-3	-3	-3	3	3	3	-3	-3	-3	3	3
$\chi_5^{(80)}$	-4	-4	-4	.	.	.	.	.	.	6	6	6	6	6	6	6	6	6	6	6
$\chi_5^{(81)}$	.	.	.	-2	-2	-2	2	2	2	-/AJ	-/AJ	-/AJ	/AJ	/AJ	/AJ	-AJ	-AJ	-AJ	AJ	AJ
$\chi_5^{(82)}$	.	.	.	-2	-2	-2	2	2	2	-AJ	-AJ	-AJ	AJ	AJ	AJ	-/AJ	-/AJ	-/AJ	/AJ	/AJ
$\chi_5^{(83)}$	.	.	.	-2	Q	/Q	-Q	-/Q	2	-AK	-/AJ	-/AL	/AJ	/AL	AK	-/AK	-AL	-AJ	AL	AJ
$\chi_5^{(84)}$	.	.	.	-2	/Q	Q	-/Q	-Q	2	-AK	-AJ	-AL	AJ	AL	/AK	-AK	-/AL	-/AJ	/AL	/AJ
$\chi_5^{(85)}$	.	.	.	-2	Q	/Q	-Q	-/Q	2	-R	-3	-R	3	R	/R	-R	-/R	-3	/R	3
$\chi_5^{(86)}$	.	.	.	-2	/Q	Q	-/Q	-Q	2	-R	-3	-/R	3	/R	R	-/R	-R	-3	R	3
$\chi_5^{(87)}$	.	.	.	-2	Q	/Q	-Q	-/Q	2	-AL	-AJ	-/AK	AJ	/AK	AL	-/AL	-AK	-/AJ	AK	/AJ
$\chi_5^{(88)}$	.	.	.	-2	/Q	Q	-/Q	-Q	2	-/AL	-/AJ	-AK	/AJ	AK	/AL	-AL	-/AK	-AJ	/AK	AJ
$\chi_5^{(89)}$	-B	-B	-4	.	.	.	.	.	.	/D	6	D	6	D	/D	D	/D	6	/D	6
$\chi_5^{(90)}$	-B	-B	-4	.	.	.	.	.	.	D	6	/D	6	/D	D	/D	D	6	D	6
$\chi_5^{(91)}$	.	.	.	.	.	.	.	.	.	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8	-8
$\chi_5^{(92)}$	.	.	.	.	.	.	.	.	.	-8	-8	-8	8	8	8	-8	-8	-8	8	8
$\chi_5^{(93)}$	.	.	.	.	.	.	.	.	.	-V	-8	-V	-8	-V	-V	-V	-V	-8	-V	-8
$\chi_5^{(94)}$	.	.	.	.	.	.	.	.	.	-V	-8	-V	-8	-V	-V	-V	-V	-8	-V	-8
$\chi_5^{(95)}$	.	.	.	.	.	.	.	.	.	-V	-8	-V	8	V	/V	-V	-V	-8	/V	8
$\chi_5^{(96)}$	.	.	.	.	.	.	.	.	.	-V	-8	-V	8	/V	V	-V	-V	-8	V	8
$\chi_5^{(97)}$	.	.	.	.	.	.	.	.	.	8	8	8	-8	-8	-8	8	8	8	-8	-8
$\chi_5^{(98)}$	.	.	.	.	.	.	.	.	.	/V	8	V	-8	-V	-V	V	/V	8	-V	-8
$\chi_5^{(99)}$	.	.	.	.	.	.	.	.	.	V	8	/V	-8	-V	-V	/V	V	8	-V	-8
$\chi_5^{(100)}$	9	9	9	-3	-3	-3	-3	-3	-3	.	.	.	.	.	.	.	.	.	.	.
$\chi_5^{(101)}$	W	/W	9	-3	-R	-/R	-R	-/R	-3	.	.	.	.	.	.	.	.	.	.	.
$\chi_5^{(102)}$	/W	W	9	-3	-/R	-R	-/R	-R	-3	.	.	.	.	.	.	.	.	.	.	.
	50										60									
$\chi_5^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_5^{(2)}$	A	1	A	/A	A	/A	1	1	A	/A	A	/A	1	A	/A	1	/A	1	A	A
$\chi_5^{(3)}$	/A	1	/A	A	/A	A	1	1	/A	A	/A	A	1	/A	A	1	A	1	/A	A
$\chi_5^{(4)}$	-X	/A	/A	/A	-A	-A	-/A	A	A	A	-A	-A	-A	-T	-T	-T	T	T	-T	-T
$\chi_5^{(5)}$	-X	A	A	A	-A	-A	-A	/A	/A	/A	-A	-A	-A	-T	-T	-T	/T	/T	/T	-T
$\chi_5^{(6)}$	-Y	A	/A	1	-A	-1	-A	/A	1	A	-1	-A	-A	S	T	-/T	-T	/T	-S	-T
$\chi_5^{(7)}$	-Y	/A	A	1	-A	-1	-A	A	1	/A	-1	-A	-A	-S	/T	-T	-/T	T	S	-T
$\chi_5^{(8)}$	-Z	/A	1	A	-1	-A	-A	/A	A	/A	1	-A	-1	-A	/T	-S	-T	S	T	-T
$\chi_5^{(9)}$	-Z	A	1	/A	-1	-A	-A	/A	A	1	-A	-1	-A	T	S	-/T	-S	/T	-T	-T
$\chi_5^{(10)}$	-X	/A	/A	/A	/A	/A	/A	A	A	A	A	A	A	-T	-T	-T	-T	-T	-T	-T

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$\chi_5^{(11)}$	-X	A	A	A	A	A	A	/A	/A	/A	/A	/A	/A	-/T	-/T	-/T	-/T	-/T	-/T	-T	-T	-T		
$\chi_5^{(12)}$	-/Z	/A	1	A	1	A	/A	A	/A	1	/A	1	A	/T	-S	-T	-S	-T	/T	S	T	-/T		
$\chi_5^{(13)}$	-Z	A	1	/A	1	/A	A	/A	A	1	A	1	/A	T	S	-/T	S	-/T	T	-S	/T	-T		
$\chi_5^{(14)}$	-/Y	A	/A	1	/A	1	A	/A	1	A	1	A	/A	S	T	-/T	T	-/T	S	/T	-S	-T		
$\chi_5^{(15)}$	-Y	/A	A	1	A	1	/A	A	1	/A	1	/A	A	-S	/T	-T	/T	-T	-S	T	S	-/T		
$\chi_5^{(16)}$	-3	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1		
$\chi_5^{(17)}$	-R	-1	-A	-/A	-A	-/A	-1	-1	-A	-/A	-A	-/A	-1	A	/A	1	/A	1	A	A	/A	1		
$\chi_5^{(18)}$	-/R	-1	-/A	-A	-/A	-A	-1	-1	-/A	-A	-/A	-A	-1	/A	A	1	A	1	/A	/A	A	1		
$\chi_5^{(19)}$	/AA	-A	-A	-A	-A	-A	-A	-/A	-/A	-/A	-/A	-/A	-/A	-/X	-/X	-/X	-/X	-/X	-/X	-X	-X	-X		
$\chi_5^{(20)}$	AA	-/A	-/A	-/A	-/A	-/A	-/A	-A	-A	-A	-A	-A	-A	-X	-X	-X	-X	-X	-X	-/X	-/X	-/X		
$\chi_5^{(21)}$	/AB	-A	-/A	-1	-/A	-1	-A	-/A	-1	-A	-1	-A	-/A	-/Z	-Y	-/X	-Y	-/X	-/Z	-/Y	-Z	-X		
$\chi_5^{(22)}$	AB	-/A	-A	-1	-A	-1	-/A	-A	-1	-/A	-1	-/A	-A	-Z	-/Y	-X	-/Y	-X	-Z	-Y	-/Z	-/X		
$\chi_5^{(23)}$	/AC	-/A	-1	-A	-1	-A	-/A	-A	-/A	-1	-/A	-1	-A	-/Y	-Z	-X	-Z	-X	-/Y	-/Z	-Y	-/X		
$\chi_5^{(24)}$	AC	-A	-1	-/A	-1	-/A	-A	-/A	-A	-1	-A	-1	-/A	-Y	-/Z	-/X	-/Z	-/X	-Y	-Z	-/Y	-X		
$\chi_5^{(25)}$	6	.	.	.	.	.	.	.	.	.	.	.	.	2	2	2	2	2	2	2	2	2
$\chi_5^{(26)}$	-3	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1		
$\chi_5^{(27)}$	-R	-1	-A	-/A	-A	-/A	-1	-1	-A	-/A	-A	-/A	-1	A	/A	1	/A	1	A	A	/A	1		
$\chi_5^{(28)}$	-/R	-1	-/A	-A	-/A	-A	-1	-1	-/A	-A	-/A	-A	-1	/A	A	1	A	1	/A	/A	A	1		
$\chi_5^{(29)}$	D	.	.	.	.	.	.	.	.	.	.	.	.	-Q	-/Q	2	-/Q	2	-Q	-Q	-/Q	2
$\chi_5^{(30)}$	/D	.	.	.	.	.	.	.	.	.	.	.	.	-/Q	-Q	2	-Q	2	-/Q	-/Q	-Q	2
$\chi_5^{(31)}$	7	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	3	3	3	-3	-3	-3	3	3	3		
$\chi_5^{(32)}$	2	.	.	.	.	.	.	.	.	.	.	.	.	-2	-2	-2	-2	-2	-2	-2	-2	-2
$\chi_5^{(33)}$	-/AD	A	A	A	-A	-A	-A	/A	/A	/A	-/A	-/A	-/A	-/R	-/R	-/R	/R	/R	/R	-R	-R	-R		
$\chi_5^{(34)}$	-AD	/A	/A	/A	-/A	-/A	-/A	A	A	A	-A	-A	-A	-R	-R	-R	R	R	R	-/R	-/R	-/R		
$\chi_5^{(35)}$	-/AE	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	-S	-S	-S	S	S	S	S	S	S		
$\chi_5^{(36)}$	-AE	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	S	S	S	-S	-S	-S	-S	-S	-S		
$\chi_5^{(37)}$	U	1	A	/A	-A	-/A	-1	1	A	/A	-A	-/A	-1	R	/R	3	-/R	-3	-R	R	/R	3		
$\chi_5^{(38)}$	/U	1	/A	A	-/A	-A	-1	1	/A	A	-/A	-A	-1	/R	R	3	-R	-3	-/R	/R	R	3		
$\chi_5^{(39)}$	-/AF	1	A	/A	-A	-/A	-1	1	A	/A	-A	-/A	-1	-T	/T	-S	-/T	S	T	T	-/T	S		
$\chi_5^{(40)}$	-AF	1	/A	A	-/A	-A	-1	1	/A	A	-/A	-A	-1	-/T	T	S	-T	-S	/T	/T	-T	-S		
$\chi_5^{(41)}$	-/AG	/A	1	A	-1	-A	-/A	A	/A	1	-/A	-1	-A	-/R	-3	-R	3	R	/R	-3	-R	-/R		
$\chi_5^{(42)}$	-AG	A	1	/A	-1	-/A	-A	/A	A	1	-A	-1	-/A	-R	-3	-/R	3	/R	R	-3	-/R	-R		
$\chi_5^{(43)}$	-/AH	1	A	/A	-A	-/A	-1	1	A	/A	-A	-/A	-1	T	-/T	S	/T	-S	-T	-T	/T	-S		
$\chi_5^{(44)}$	-AH	1	/A	A	-/A	-A	-1	1	/A	A	-/A	-A	-1	/T	-T	-S	T	S	-/T	-/T	T	S		
$\chi_5^{(45)}$	-/AI	A	/A	1	-/A	-1	-A	/A	1	A	-1	-A	-/A	-3	-R	-/R	R	/R	3	-/R	-3	-R		
$\chi_5^{(46)}$	-AI	/A	A	1	-A	-1	-/A	A	1	/A	-1	-/A	-A	-3	-/R	-R	/R	R	3	-R	-3	-/R		
$\chi_5^{(47)}$	-Q	.	.	.	.	.	.	.	.	.	.	.	.	Q	/Q	-2	/Q	-2	Q	Q	/Q	-2
$\chi_5^{(48)}$	-/Q	.	.	.	.	.	.	.	.	.	.	.	.	/Q	Q	-2	Q	-2	/Q	/Q	Q	-2
$\chi_5^{(49)}$	6	.	.	.	.	.	.	.	.	.	.	.	.	2	2	2	2	2	2	2	2	2
$\chi_5^{(50)}$	D	.	.	.	.	.	.	.	.	.	.	.	.	-Q	-/Q	2	-/Q	2	-Q	-Q	-/Q	2
$\chi_5^{(51)}$	/D	.	.	.	.	.	.	.	.	.	.	.	.	-/Q	-Q	2	-Q	2	-/Q	-/Q	-Q	2
$\chi_5^{(52)}$	3	1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1		
$\chi_5^{(53)}$	/AJ	-A	-A	-A	-A	-A	-A	-/A	-/A	-/A	-/A	-/A	-/A	-/T	-/T	-/T	-/T	-/T	-/T	-T	-T	-T		
$\chi_5^{(54)}$	AJ	-/A	-/A	-/A	-/A	-/A	-/A	-A	-A	-A	-A	-A	-A	-T	-T	-T	-T	-T	-T	-/T	-/T	-/T		
$\chi_5^{(55)}$	/AK	-/A	-1	-A	-1	-A	-/A	-A	-/A	-1	-/A	-1	-A	/T	-S	-T	-S	-T	/T	S	T	-/T		
$\chi_5^{(56)}$	AK	-A	-1	-/A	-1	-/A	-A	-/A	-A	-1	-A	-1	-/A	T	S	-/T	S	-/T	T	-S	/T	-T		
$\chi_5^{(57)}$	/AL	-A	-/A	-1	-/A	-1	-A	-/A	-1	-A	-1	-A	-/A	S	T	-/T	T	-/T	S	/T	-S	-T		
$\chi_5^{(58)}$	AL	-/A	-A	-1	-A	-1	-/A	-A	-1	-/A	-1	-/A	-A	-S	/T	-T	/T	-T	-S	T	S	-/T		
$\chi_5^{(59)}$	R	1	A	/A	A	/A	1	1	A	/A	A	/A	1	-A	-/A	-1	-/A	-1	-A	-A	-/A	-1		
$\chi_5^{(60)}$	/R	1	/A	A	/A	A	1	1	/A	A	/A	A	1	-/A	-A	-1	-A	-1	-/A	-/A	-A	-1		
$\chi_5^{(61)}$	-W	A	A	A	-A	-A	-A	/A	/A	/A	-/A	-/A	-/A	/R	/R	/R	-/R	-/R	-/R	R	R	R		
$\chi_5^{(62)}$	-/W	/A	/A	/A	-/A	-/A	-/A	A	A	A	-A	-A	-A	R	R	R	-R	-R	-R	/R	/R	/R		
$\chi_5^{(63)}$	-9	/A	1	A	-1	-A	-/A	A	/A	1	-/A	-1	-A	/R	3	R	-3	-R	-R	-R	3	R	/R	
$\chi_5^{(64)}$	9	-/A	-1	-A	1	/A	/A	-A	-/A	-1	/A	1	/A	-R	-3	-R	3	/R	/R	/R	-3	-R	-/R	

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$\chi_5^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
$\chi_5^{(2)}$	/A	1	A	1	A	/A	A	/A	1	A	/A	1	/A	1	A	1	A	/A	A	/A	1	/A	1
$\chi_5^{(3)}$	A	1	/A	1	/A	A	/A	A	1	/A	A	1	A	1	/A	1	/A	A	/A	A	1	A	1
$\chi_5^{(4)}$	/T	/T	/T	-1	-1	-1	1	1	1	/A	/A	/A	-/A	-/A	-/A	A	A	A	-A	-A	-A	-1	-1
$\chi_5^{(5)}$	T	T	T	-1	-1	-1	1	1	1	A	A	A	-A	-A	-A	/A	/A	/A	-/A	-/A	-/A	-1	-1
$\chi_5^{(6)}$	S	T	-/T	-1	-A	-/A	A	/A	1	/A	1	A	-1	-A	-/A	/A	1	A	-1	-A	-/A	-/A	-1
$\chi_5^{(7)}$	-S	/T	-T	-1	-/A	-A	/A	A	1	A	1	/A	-1	-/A	-A	A	1	/A	-1	-/A	-A	-A	-1
$\chi_5^{(8)}$	-T	/T	-S	-1	-A	-/A	A	/A	1	1	A	/A	-A	-/A	-1	A	/A	1	-/A	-1	-A	-/A	-1
$\chi_5^{(9)}$	-/T	T	S	-1	-/A	-A	/A	A	1	1	/A	A	-/A	-A	-1	/A	A	1	-A	-1	-/A	-A	-1
$\chi_5^{(10)}$	-/T	-/T	-/T	2	2	2	2	2	2	-/A	-/A	-/A	-/A	-/A	-/A	-A	-A	-A	-A	-A	-A	.	.
$\chi_5^{(11)}$	-T	-T	-T	2	2	2	2	2	2	-A	-A	-A	-A	-A	-A	-/A	-/A	-/A	-/A	-/A	-/A	.	.
$\chi_5^{(12)}$	T	-/T	S	2	-Q	-/Q	-Q	-/Q	2	-1	-A	-/A	-A	-/A	-1	-A	-/A	-1	-/A	-1	-A	.	.
$\chi_5^{(13)}$	/T	-T	-S	2	-/Q	-Q	-/Q	-Q	2	-1	-/A	-A	-/A	-A	-1	-/A	-A	-1	-A	-1	-/A	.	.
$\chi_5^{(14)}$	-S	-T	/T	2	-Q	-/Q	-Q	-/Q	2	-/A	-1	-A	-1	-A	-/A	-/A	-1	-A	-1	-A	-/A	.	.
$\chi_5^{(15)}$	S	-/T	T	2	-/Q	-Q	-/Q	-Q	2	-A	-1	-/A	-1	-/A	-A	-A	-1	-/A	-1	-/A	-A	.	.
$\chi_5^{(16)}$	1	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1
$\chi_5^{(17)}$	/A	1	A	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	/A	1
$\chi_5^{(18)}$	A	1	/A	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	A	1
$\chi_5^{(19)}$	-X	-X	-X	1	1	1	1	1	1	/A	/A	/A	/A	/A	/A	A	A	A	A	A	A	.	.
$\chi_5^{(20)}$	-/X	-/X	-/X	1	1	1	1	1	1	A	A	A	A	A	A	/A	/A	/A	/A	/A	/A	.	.
$\chi_5^{(21)}$	-Z	-X	-/Y	1	A	/A	A	/A	1	1	A	/A	A	/A	1	A	/A	1	/A	1	A	.	.
$\chi_5^{(22)}$	-/Z	-/X	-Y	1	/A	A	/A	A	1	1	/A	A	/A	A	1	/A	A	1	A	1	/A	.	.
$\chi_5^{(23)}$	-Y	-/X	-/Z	1	A	/A	A	/A	1	/A	1	A	1	A	/A	/A	1	A	1	A	/A	.	.
$\chi_5^{(24)}$	-/Y	-X	-Z	1	/A	A	/A	A	1	A	1	/A	1	/A	A	A	1	/A	1	/A	A	.	.
$\chi_5^{(25)}$	2	2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_5^{(26)}$	1	1	1	3	3	3	3	3	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_5^{(27)}$	/A	1	A	3	R	/R	R	/R	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_5^{(28)}$	A	1	/A	3	/R	R	/R	R	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_5^{(29)}$	-/Q	2	-Q	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_5^{(30)}$	-Q	2	-/Q	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_5^{(31)}$	-3	-3	-3	-2	-2	-2	2	2	2	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	.	.
$\chi_5^{(32)}$	-2	-2	-2	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	.	.
$\chi_5^{(33)}$	R	R	R	-2	-2	-2	2	2	2	-A	-A	-A	A	A	A	-/A	-/A	-/A	/A	/A	/A	.	.
$\chi_5^{(34)}$	/R	/R	/R	-2	-2	-2	2	2	2	-/A	-/A	-/A	/A	/A	/A	-A	-A	-A	A	A	A	.	.
$\chi_5^{(35)}$	-S	-S	-S	1	1	1	-1	-1	-1	-/A	-/A	-/A	/A	/A	/A	-A	-A	-A	A	A	A	.	.
$\chi_5^{(36)}$	S	S	S	1	1	1	-1	-1	-1	-A	-A	-A	A	A	A	-/A	-/A	-/A	/A	/A	/A	.	.
$\chi_5^{(37)}$	-/R	-3	-R	-2	Q	/Q	-Q	-/Q	2	-A	-/A	-1	/A	1	A	-1	-A	-/A	A	/A	1	.	.
$\chi_5^{(38)}$	-R	-3	-/R	-2	/Q	Q	-/Q	-Q	2	-/A	-A	-1	A	1	/A	-1	-/A	-A	/A	A	1	.	.
$\chi_5^{(39)}$	/T	-S	-T	1	A	/A	-A	-/A	-1	-1	-A	-/A	A	/A	1	-A	-/A	-1	/A	1	A	.	.
$\chi_5^{(40)}$	T	S	-/T	1	/A	A	-/A	-A	-1	-1	-/A	-A	/A	A	1	-/A	-A	-1	A	1	/A	.	.
$\chi_5^{(41)}$	R	/R	3	-2	Q	/Q	-Q	-/Q	2	-1	-A	-/A	A	/A	1	-A	-/A	-1	/A	1	A	.	.
$\chi_5^{(42)}$	/R	R	3	-2	/Q	Q	-/Q	-Q	2	-1	-/A	-A	/A	A	1	-/A	-A	-1	A	1	/A	.	.
$\chi_5^{(43)}$	-/T	S	T	1	A	/A	-A	-/A	-1	-/A	-1	-A	1	A	/A	-/A	-1	-A	1	A	/A	.	.
$\chi_5^{(44)}$	-T	-S	/T	1	/A	A	-/A	-A	-1	-A	-1	-/A	1	/A	A	-A	-1	-/A	1	/A	A	.	.
$\chi_5^{(45)}$	3	R	/R	-2	Q	/Q	-Q	-/Q	2	-/A	-1	-A	1	A	/A	-/A	-1	-A	1	A	/A	.	.

[illegible]

	70										80											
$\chi_5^{(91)}$.	.	.	-2	-2	-2	-2	-2	-2	1	1	1	1	1	1	1	1	1	1	1	-1	-1
$\chi_5^{(92)}$.	.	.	2	2	2	-2	-2	-2	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	-1
$\chi_5^{(93)}$.	.	.	-2	Q	/Q	Q	/Q	-2	A	/A	1	/A	1	A	1	A	/A	A	/A	1	-/A
$\chi_5^{(94)}$.	.	.	-2	/Q	Q	/Q	Q	-2	/A	A	1	A	1	/A	1	/A	A	/A	A	1	-A
$\chi_5^{(95)}$.	.	.	2	-Q	-/Q	Q	/Q	-2	A	/A	1	-/A	-1	-A	1	A	/A	-A	-/A	-1	-/A
$\chi_5^{(96)}$.	.	.	2	-/Q	-Q	/Q	Q	-2	/A	A	1	-A	-1	-/A	1	/A	A	-/A	-A	-1	-A
$\chi_5^{(97)}$.	.	.	4	4	4	-4	-4	-4	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	.
$\chi_5^{(98)}$.	.	.	4	B	/B	-B	-/B	-4	-A	-/A	-1	/A	1	A	-1	-A	-/A	A	/A	1	.
$\chi_5^{(99)}$.	.	.	4	/B	B	-/B	-B	-4	-/A	-A	-1	A	1	/A	-1	-/A	-A	/A	A	1	.
$\chi_5^{(100)}$	1	1
$\chi_5^{(101)}$	/A	1
$\chi_5^{(102)}$	A	1

	90										100									
$\chi_5^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_5^{(2)}$	A	1	A	/A	A	/A	1	/A	1	A	1	A	/A							
$\chi_5^{(3)}$	/A	1	/A	A	/A	A	1	A	1	/A	1	/A	A							
$\chi_5^{(4)}$	-1	1	1	1	S	S	S	-S	-S	-S	.	.	.							
$\chi_5^{(5)}$	-1	1	1	1	-S	-S	-S	S	S	S	.	.	.							
$\chi_5^{(6)}$	-A	1	A	/A	-T	/T	-S	-/T	S	T	.	.	.							
$\chi_5^{(7)}$	-/A	1	/A	A	-/T	T	S	-T	-S	/T	.	.	.							
$\chi_5^{(8)}$	-A	1	A	/A	T	-/T	S	/T	-S	-T	.	.	.							
$\chi_5^{(9)}$	-/A	1	/A	A	/T	-T	-S	T	S	-/T	.	.	.							
$\chi_5^{(10)}$	.	.	.	.	.	.	.	.	.	.	-1	-1	-1							
$\chi_5^{(11)}$	.	.	.	.	.	.	.	.	.	.	-1	-1	-1							
$\chi_5^{(12)}$	.	.	.	.	.	.	.	.	.	.	-1	-A	-/A							
$\chi_5^{(13)}$	.	.	.	.	.	.	.	.	.	.	-1	-/A	-A							
$\chi_5^{(14)}$	.	.	.	.	.	.	.	.	.	.	-1	-A	-/A							
$\chi_5^{(15)}$	.	.	.	.	.	.	.	.	.	.	-1	-/A	-A							
$\chi_5^{(16)}$	1	1	1	1	-2	-2	-2	-2	-2	-2	.	.	.							
$\chi_5^{(17)}$	A	1	A	/A	Q	/Q	-2	/Q	-2	Q	.	.	.							
$\chi_5^{(18)}$	/A	1	/A	A	/Q	Q	-2	Q	-2	/Q	.	.	.							
$\chi_5^{(19)}$	.	.	.	.	-1	-1	-1	-1	-1	-1	.	.	.							
$\chi_5^{(20)}$	.	.	.	.	-1	-1	-1	-1	-1	-1	.	.	.							
$\chi_5^{(21)}$	.	.	.	.	-A	-/A	-1	-/A	-1	-A	.	.	.							
$\chi_5^{(22)}$	.	.	.	.	-/A	-A	-1	-A	-1	-/A	.	.	.							
$\chi_5^{(23)}$	.	.	.	.	-A	-/A	-1	-/A	-1	-A	.	.	.							
$\chi_5^{(24)}$	.	.	.	.	-/A	-A	-1	-A	-1	-/A	.	.	.							
$\chi_5^{(25)}$	.	.	.	.	2	2	2	2	2	2	-1	-1	-1							
$\chi_5^{(26)}$	.	.	.	.	1	1	1	1	1	1	1	1	1							
$\chi_5^{(27)}$	.	.	.	.	A	/A	1	/A	1	A	1	A	/A							
$\chi_5^{(28)}$	.	.	.	.	/A	A	1	A	1	/A	1	/A	A							
$\chi_5^{(29)}$	.	.	.	.	-Q	-/Q	2	-/Q	2	-Q	-1	-A	-/A							
$\chi_5^{(30)}$	.	.	.	.	-/Q	-Q	2	-Q	2	-/Q	-1	-/A	-A							
$\chi_5^{(31)}$	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_5^{(32)}$	.	.	.	.	1	1	1	1	1	1	.	.	.							
$\chi_5^{(33)}$	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_5^{(34)}$	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_5^{(35)}$	.	.	.	.	S	S	S	-S	-S	-S	.	.	.							
$\chi_5^{(36)}$	.	.	.	.	-S	-S	-S	S	S	S	.	.	.							

	90				100								
$\chi_5^{(40)}$	/T	-T	-S	T	S	-/T	.	.	.
$\chi_5^{(41)}$
$\chi_5^{(42)}$
$\chi_5^{(43)}$	-T	/T	-S	-/T	S	T	.	.	.
$\chi_5^{(44)}$	-/T	T	S	-T	-S	/T	.	.	.
$\chi_5^{(45)}$
$\chi_5^{(46)}$
$\chi_5^{(47)}$	A	/A	1	/A	1	A	.	.	.
$\chi_5^{(48)}$	/A	A	1	A	1	/A	.	.	.
$\chi_5^{(49)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	.	.	.
$\chi_5^{(50)}$	-A	-1	-A	-/A	-A	-/A	-1	-/A	-1	-A	.	.	.
$\chi_5^{(51)}$	-/A	-1	-/A	-A	-/A	-A	-1	-A	-1	-/A	.	.	.
$\chi_5^{(52)}$	-1	-1	-1	-1	-1	-1	.	.	.
$\chi_5^{(53)}$
$\chi_5^{(54)}$
$\chi_5^{(55)}$
$\chi_5^{(56)}$
$\chi_5^{(57)}$
$\chi_5^{(58)}$
$\chi_5^{(59)}$	-A	-/A	-1	-/A	-1	-A	.	.	.
$\chi_5^{(60)}$	-/A	-A	-1	-A	-1	-/A	.	.	.
$\chi_5^{(61)}$	1	-1	-1	-1	.	.	.	.	.	.	.	.	.
$\chi_5^{(62)}$	1	-1	-1	-1	.	.	.	.	.	.	.	.	.
$\chi_5^{(63)}$	A	-1	-A	-/A	.	.	.	.	.	.	.	.	.
$\chi_5^{(64)}$	/A	-1	-/A	-A	.	.	.	.	.	.	.	.	.
$\chi_5^{(65)}$	A	-1	-A	-/A	.	.	.	.	.	.	.	.	.
$\chi_5^{(66)}$	/A	-1	-/A	-A	.	.	.	.	.	.	.	.	.
$\chi_5^{(67)}$	1	1	1	1	1	1	.	.	.
$\chi_5^{(68)}$	1	1	1	1	1	1	.	.	.
$\chi_5^{(69)}$	A	/A	1	/A	1	A	.	.	.
$\chi_5^{(70)}$	/A	A	1	A	1	/A	.	.	.
$\chi_5^{(71)}$	A	/A	1	/A	1	A	.	.	.
$\chi_5^{(72)}$	/A	A	1	A	1	/A	.	.	.
$\chi_5^{(73)}$	1	1	1
$\chi_5^{(74)}$	1	1	1
$\chi_5^{(75)}$	1	A	/A
$\chi_5^{(76)}$	1	/A	A
$\chi_5^{(77)}$	1	A	/A
$\chi_5^{(78)}$	1	/A	A
$\chi_5^{(79)}$
$\chi_5^{(80)}$	-1	-1	-1	-1	-1	-1	.	.	.
$\chi_5^{(81)}$	S	S	S	-S	-S	-S	.	.	.
$\chi_5^{(82)}$	-S	-S	-S	S	S	S	.	.	.
$\chi_5^{(83)}$	T	-/T	S	/T	-S	-T	.	.	.
$\chi_5^{(84)}$	/T	-T	-S	T	S	-/T	.	.	.

	90				100								
$\chi_5^{(85)}$	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_5^{(86)}$	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_5^{(87)}$	.	.	.	.	-T	/T	-S	-/T	S	T	.	.	.
$\chi_5^{(88)}$	.	.	.	.	-/T	T	S	-T	-S	/T	.	.	.
$\chi_5^{(89)}$	.	.	.	.	-A	-/A	-1	-/A	-1	-A	.	.	.
$\chi_5^{(90)}$	.	.	.	.	-/A	-A	-1	-A	-1	-/A	.	.	.
$\chi_5^{(91)}$	-1	-1	-1	-1	.	.	.	.	.	.	.	.	.
$\chi_5^{(92)}$	-1	1	1	1	.	.	.	.	.	.	.	.	.
$\chi_5^{(93)}$	-A	-1	-A	-/A	.	.	.	.	.	.	.	.	.
$\chi_5^{(94)}$	-/A	-1	-/A	-A	.	.	.	.	.	.	.	.	.
$\chi_5^{(95)}$	-A	1	A	/A	.	.	.	.	.	.	.	.	.
$\chi_5^{(96)}$	-/A	1	/A	A	.	.	.	.	.	.	.	.	.
$\chi_5^{(97)}$	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_5^{(98)}$	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_5^{(99)}$	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_5^{(100)}$	1	1	1	1	.	.	.	.	.	.	-1	-1	-1
$\chi_5^{(101)}$	A	1	A	/A	.	.	.	.	.	.	-1	-A	-/A
$\chi_5^{(102)}$	/A	1	/A	A	.	.	.	.	.	.	-1	-/A	-A

where $A = E(3)^2 = (-1-ER(-3))/2 = -1-b3$, $B = 4^*E(3)^2 = -2-2^*ER(-3) = -2-2i3$, $C = 5^*E(3)^2 = (-5-5^*ER(-3))/2 = -5-5b3$, $D = 6^*E(3)^2 = -3-3^*ER(-3) = -3-3i3$, $E = 10^*E(3)^2 = -5-5^*ER(-3) = -5-5i3$, $F = 15^*E(3)^2 = (-15-15^*ER(-3))/2 = -15-15b3$, $G = 20^*E(3)^2 = -10-10^*ER(-3) = -10-10i3$, $H = 24^*E(3)^2 = -12-12^*ER(-3) = -12-12i3$, $I = 30^*E(3)^2 = -15-15^*ER(-3) = -15-15i3$, $J = 36^*E(3)^2 = -18-18^*ER(-3) = -18-18i3$, $K = 40^*E(3)^2 = -20-20^*ER(-3) = -20-20i3$, $L = 45^*E(3)^2 = (-45-45^*ER(-3))/2 = -45-45b3$, $M = 60^*E(3)^2 = -30-30^*ER(-3) = -30-30i3$, $N = 64^*E(3)^2 = -32-32^*ER(-3) = -32-32i3$, $O = 80^*E(3)^2 = -40-40^*ER(-3) = -40-40i3$, $P = 81^*E(3)^2 = (-81-81^*ER(-3))/2 = -81-81b3$, $Q = -2^*E(3)^2 = 1+ER(-3) = 1+i3$, $R = 3^*E(3)^2 = (-3-3^*ER(-3))/2 = -3-3b3$, $S = E(3)-E(3)^2 = ER(-3) = i3$, $T = -2^*E(3)-E(3)^2 = (3-ER(-3))/2 = 1-b3$, $U = 7^*E(3)^2 = (-7-7^*ER(-3))/2 = -7-7b3$, $V = 8^*E(3)^2 = -4-4^*ER(-3) = -4-4i3$, $W = 9^*E(3)^2 = (-9-9^*ER(-3))/2 = -9-9b3$, $X = 2^*E(3)-E(3)^2 = (-1+3^*ER(-3))/2 = 1+3b3$, $Y = -2^*E(3)-3^*E(3)^2 = (5+ER(-3))/2 = 3+b3$, $Z = E(3)+3^*E(3)^2 = -2-ER(-3) = -2-i3$, $AA = 5^*E(3)+2^*E(3)^2 = (-7+3^*ER(-3))/2 = -2+3b3$, $AB = -2^*E(3)+3^*E(3)^2 = (-1-5^*ER(-3))/2 = -3-5b3$, $AC = -5^*E(3)-3^*E(3)^2 = 4-ER(-3) = 4-i3$, $AD = -5^*E(3)-8^*E(3)^2 = (13+3^*ER(-3))/2 = 8+3b3$, $AE = E(3)-5^*E(3)^2 = 2+3^*ER(-3) = 2+3i3$, $AF = 5^*E(3)+6^*E(3)^2 = (-11-ER(-3))/2 = -6-b3$, $AG = 5^*E(3)-3^*E(3)^2 = -1+4^*ER(-3) = 3+8b3$, $AH = -E(3)-6^*E(3)^2 = (7+5^*ER(-3))/2 = 6+5b3$, $AI = 8^*E(3)+3^*E(3)^2 = (-11+5^*ER(-3))/2 = -3+5b3$, $AJ = -3^*E(3)+6^*E(3)^2 = (-3-9^*ER(-3))/2 = -6-9b3$, $AK = 3^*E(3)+9^*E(3)^2 = -6-3^*ER(-3) = -6-3i3$, $AL = -6^*E(3)-9^*E(3)^2 = (15+3^*ER(-3))/2 = 9+3b3$, $AM = 2^*E(3)+8^*E(3)^2 = -5-3^*ER(-3) = -5-3i3$, $AN = -8^*E(3)-6^*E(3)^2 = 7-ER(-3) = 7-i3$, $AO = -2^*E(3)+6^*E(3)^2 = -2-4^*ER(-3) = -2-4i3$.

The generators of G^{s_6} are:

$$\begin{pmatrix} 0 & 0 & 1 & 0 & -2 & 1 & 1 & 0 \\ -1 & 1 & 2 & 0 & -3 & 1 & 1 & 0 \\ -1 & 1 & 3 & -1 & -3 & 1 & 2 & 0 \\ -2 & 2 & 4 & -1 & -5 & 2 & 3 & -1 \\ -1 & 2 & 3 & -1 & -4 & 2 & 2 & -1 \\ -1 & 2 & 2 & -1 & -3 & 2 & 1 & 0 \\ 0 & 2 & 1 & -1 & -2 & 1 & 1 & 0 \\ 0 & 1 & 0 & 0 & -1 & 0 & 1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & -2 & 0 & 1 & 0 & 1 & 0 & -1 \\ -2 & -3 & 1 & 1 & 1 & 0 & 0 & -1 \\ -2 & -4 & 1 & 1 & 1 & 1 & 0 & -2 \\ -4 & -6 & 2 & 2 & 1 & 1 & 0 & -2 \\ -3 & -5 & 1 & 2 & 1 & 1 & -1 & -1 \\ -3 & -3 & 1 & 1 & 1 & 1 & -1 & -1 \\ -2 & -2 & 1 & 0 & 1 & 1 & -1 & 0 \\ -1 & -1 & 1 & 0 & 0 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 0 & 0 & 0 & 0 & 0 & 2 \\ -3 & 0 & 1 & 0 & 0 & 0 & 0 & 2 \\ -3 & 0 & 1 & 0 & 0 & 0 & 0 & 3 \\ -5 & -1 & 1 & 1 & 0 & 0 & 0 & 4 \\ -4 & -1 & 1 & 1 & -1 & 1 & 0 & 3 \\ -3 & 0 & 0 & 1 & -1 & 1 & 0 & 2 \\ -2 & 0 & 0 & 1 & -1 & 0 & 1 & 1 \\ -1 & 0 & 0 & 1 & -1 & 0 & 0 & 1 \end{pmatrix}, \\
\begin{pmatrix} -1 & -1 & -1 & 1 & 1 & -1 & 1 & -1 \\ -3 & -1 & 0 & 1 & 1 & -1 & 1 & -1 \\ -3 & -1 & -1 & 2 & 1 & -2 & 2 & -2 \\ -5 & -2 & -1 & 3 & 1 & -2 & 3 & -3 \\ -4 & -2 & -1 & 3 & 0 & -1 & 2 & -2 \\ -3 & -1 & -1 & 2 & 0 & 0 & 1 & -2 \\ -2 & -1 & 0 & 1 & 0 & 0 & 1 & -2 \\ -1 & -1 & 0 & 1 & 0 & 0 & 0 & -1 \end{pmatrix}.$$

The representatives of conjugacy classes of G^{s_6} are:

$$\begin{pmatrix} 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 0 & -1 & 0 & 0 & 0 & 2 \\ -1 & 1 & 1 & -1 & 0 & -1 & 0 & 3 \\ 0 & 2 & 1 & -2 & 0 & -1 & 0 & 4 \\ -1 & 3 & 2 & -3 & 0 & -1 & -1 & 6 \\ -1 & 2 & 2 & -2 & -1 & 0 & -1 & 5 \\ -1 & 2 & 1 & -1 & -1 & 0 & -1 & 4 \\ 0 & 1 & 0 & 0 & -1 & 0 & -1 & 3 \\ 0 & 1 & 0 & 0 & -1 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & -1 & 2 & -2 & 0 & 1 & -1 \\ 1 & 0 & -1 & 2 & -2 & -1 & 2 & -2 \\ 1 & 0 & -2 & 3 & -3 & -1 & 3 & -2 \\ 1 & 0 & -2 & 4 & -4 & -2 & 5 & -4 \\ 1 & 1 & -2 & 3 & -3 & -2 & 4 & -3 \\ 0 & 1 & -1 & 2 & -2 & -2 & 3 & -2 \\ 0 & 1 & -1 & 1 & -1 & -1 & 2 & -2 \\ 0 & 0 & -1 & 1 & 0 & -1 & 1 & -1 \end{pmatrix}, \\
\begin{pmatrix} -1 & -1 & 2 & -1 & 0 & 1 & 0 & -1 \\ -1 & -1 & 2 & -1 & -1 & 3 & -1 & -1 \\ -2 & -1 & 3 & -2 & 0 & 3 & -1 & -2 \\ -2 & -1 & 4 & -3 & -1 & 5 & -1 & -3 \\ -1 & -1 & 3 & -2 & -1 & 4 & -1 & -3 \\ 0 & -1 & 2 & -2 & 0 & 3 & -1 & -2 \\ 0 & 0 & 2 & -2 & 0 & 2 & -1 & -1 \\ 0 & 0 & 1 & -1 & 0 & 1 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & -1 & 0 & 2 & -1 & -1 & 0 \\ 1 & -1 & -2 & 0 & 3 & -1 & -1 & 0 \\ 1 & -1 & -3 & 1 & 3 & -1 & -2 & 0 \\ 2 & -2 & -4 & 1 & 5 & -2 & -3 & 1 \\ 1 & -2 & -3 & 1 & 4 & -2 & -2 & 1 \\ 1 & -2 & -2 & 1 & 3 & -2 & -1 & 0 \\ 0 & -2 & -1 & 1 & 2 & -1 & -1 & 0 \\ 0 & -1 & 0 & 0 & 1 & 0 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 1 & 0 & -2 & 1 & 1 & 0 \\ -1 & 1 & 2 & 0 & -3 & 1 & 1 & 0 \\ -1 & 1 & 3 & -1 & -3 & 1 & 2 & 0 \\ -2 & 2 & 4 & -1 & -5 & 2 & 3 & -1 \\ -1 & 2 & 3 & -1 & -4 & 2 & 2 & -1 \\ -1 & 2 & 2 & -1 & -3 & 2 & 1 & 0 \\ 0 & 2 & 1 & -1 & -2 & 1 & 1 & 0 \\ 0 & 1 & 0 & 0 & -1 & 0 & 1 & 0 \end{pmatrix}, \\
\begin{pmatrix} 1 & 1 & -2 & 1 & 0 & -1 & 0 & 1 \\ 1 & 1 & -2 & 1 & 1 & -3 & 1 & 1 \\ 2 & 1 & -3 & 2 & 0 & -3 & 1 & 2 \\ 2 & 1 & -4 & 3 & 1 & -5 & 1 & 3 \\ 1 & 1 & -3 & 2 & 1 & -4 & 1 & 3 \\ 0 & 1 & -2 & 2 & 0 & -3 & 1 & 2 \\ 0 & 0 & -2 & 2 & 0 & -2 & 1 & 1 \\ 0 & 0 & -1 & 1 & 0 & -1 & 0 & 1 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & -1 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & -1 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & -1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & -1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & -1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & -1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 1 & -2 & 2 & 0 & -1 & 1 \\ -1 & 0 & 1 & -2 & 2 & 1 & -2 & 2 \\ -1 & 0 & 2 & -3 & 3 & 1 & -3 & 2 \\ -1 & 0 & 2 & -4 & 4 & 2 & -5 & 4 \\ -1 & -1 & 2 & -3 & 3 & 2 & -4 & 3 \\ 0 & -1 & 1 & -2 & 2 & 2 & -3 & 2 \\ 0 & -1 & 1 & -1 & 1 & 1 & -2 & 2 \\ 0 & 0 & 1 & -1 & 0 & 1 & -1 & 1 \end{pmatrix},$$

$$\begin{pmatrix} 0 & -1 & 0 & 1 & 0 & 0 & 0 & -2 \\ 1 & -1 & -1 & 1 & 0 & 1 & 0 & -3 \\ 0 & -2 & -1 & 2 & 0 & 1 & 0 & -4 \\ 1 & -3 & -2 & 3 & 0 & 1 & 1 & -6 \\ 1 & -2 & -2 & 2 & 1 & 0 & 1 & -5 \\ 1 & -2 & -1 & 1 & 1 & 0 & 1 & -4 \\ 0 & -1 & 0 & 0 & 1 & 0 & 1 & -3 \\ 0 & -1 & 0 & 0 & 1 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 0 & -1 & 2 & -2 & 1 & 0 \\ 2 & 0 & -1 & -1 & 3 & -3 & 1 & 0 \\ 2 & 0 & 0 & -2 & 4 & -4 & 2 & -1 \\ 3 & 1 & -1 & -3 & 6 & -6 & 3 & -1 \\ 2 & 1 & 0 & -3 & 5 & -5 & 2 & 0 \\ 2 & 1 & 0 & -2 & 3 & -4 & 2 & 0 \\ 2 & 1 & 0 & -2 & 2 & -2 & 1 & 0 \\ 1 & 0 & 0 & -1 & 1 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & -1 & 0 & 0 & -1 & 1 & 0 & 1 \\ 1 & -2 & 0 & 0 & -1 & 2 & 0 & 0 \\ 2 & -3 & 0 & 0 & -1 & 2 & 0 & 1 \\ 2 & -5 & 0 & 1 & -2 & 3 & 0 & 1 \\ 2 & -4 & 0 & 1 & -2 & 2 & 1 & 0 \\ 2 & -3 & -1 & 1 & -1 & 1 & 1 & 0 \\ 1 & -2 & -1 & 1 & -1 & 1 & 1 & 0 \\ 1 & -1 & -1 & 1 & -1 & 1 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 1 & 1 & -2 & 1 & -1 & 1 & 0 & -1 \\ 1 & 1 & -2 & 1 & -1 & 2 & -1 & -1 \\ 2 & 2 & -3 & 1 & -2 & 3 & -1 & -1 \\ 3 & 3 & -4 & 1 & -2 & 4 & -2 & -2 \\ 3 & 2 & -4 & 1 & -1 & 3 & -2 & -1 \\ 2 & 1 & -3 & 1 & -1 & 3 & -2 & -1 \\ 1 & 1 & -2 & 1 & -1 & 2 & -2 & 0 \\ 0 & 1 & -1 & 0 & 0 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 2 & 0 & -1 & 0 & 0 & -1 \\ -1 & 0 & 2 & 1 & -2 & -1 & 1 & -1 \\ -2 & 0 & 3 & 1 & -2 & -1 & 0 & -1 \\ -2 & 0 & 4 & 2 & -4 & -1 & 0 & -1 \\ -2 & 0 & 3 & 2 & -3 & -1 & 0 & -1 \\ -2 & 0 & 3 & 1 & -2 & -1 & 0 & 0 \\ -1 & -1 & 2 & 1 & -1 & -1 & 0 & 0 \\ 0 & 0 & 1 & 0 & 0 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -2 & 0 & 0 & 0 & 1 & 0 & -1 & 1 \\ -3 & 1 & 1 & -1 & 1 & 0 & -1 & 2 \\ -4 & 1 & 0 & 0 & 1 & 0 & -1 & 2 \\ -6 & 1 & 1 & -1 & 2 & 0 & -1 & 3 \\ -5 & 1 & 1 & -1 & 1 & 1 & -1 & 2 \\ -4 & 1 & 1 & -1 & 1 & 1 & -1 & 1 \\ -3 & 1 & 1 & -1 & 1 & 0 & 0 & 0 \\ -2 & 0 & 1 & 0 & 0 & 0 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 0 & 1 & -1 & 0 & 1 & -2 & 1 & 1 \\ -1 & 1 & -2 & 1 & 1 & -2 & 1 & 1 \\ -1 & 2 & -2 & 1 & 1 & -3 & 1 & 2 \\ -1 & 2 & -4 & 2 & 2 & -4 & 1 & 3 \\ -1 & 1 & -3 & 2 & 1 & -3 & 1 & 3 \\ 0 & 1 & -3 & 2 & 0 & -2 & 1 & 2 \\ 0 & 0 & -2 & 2 & 0 & -2 & 1 & 1 \\ 0 & 0 & -1 & 1 & 0 & -1 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 0 & 1 & -1 & 0 & 0 & 0 \\ -1 & -1 & 1 & 1 & -1 & 0 & -1 & 0 \\ -1 & -1 & 1 & 1 & -1 & -1 & 0 & 0 \\ -2 & -1 & 2 & 1 & -2 & 0 & -1 & 0 \\ -1 & 0 & 1 & 1 & -2 & 0 & -1 & 0 \\ -1 & 0 & 0 & 1 & -1 & 0 & -1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & -1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & -1 & 0 & 1 & 0 & 0 & -2 \\ 1 & 0 & 0 & -1 & 2 & -1 & 1 & -3 \\ 2 & -1 & -1 & 0 & 2 & -1 & 1 & -4 \\ 2 & -1 & -1 & 0 & 3 & -2 & 2 & -6 \\ 1 & -1 & -1 & 0 & 3 & -2 & 2 & -5 \\ 0 & -1 & 0 & 0 & 2 & -1 & 1 & -4 \\ 0 & -1 & 0 & 0 & 1 & 0 & 1 & -3 \\ 0 & -1 & 0 & 0 & 1 & 0 & 0 & -1 \end{pmatrix}, \\
\begin{pmatrix} 0 & 1 & 1 & 0 & -2 & 1 & 0 & 0 \\ 1 & 2 & 0 & 0 & -3 & 2 & 0 & 0 \\ 0 & 2 & 1 & 0 & -4 & 3 & 0 & 0 \\ 1 & 3 & 1 & 0 & -6 & 4 & 1 & -1 \\ 1 & 3 & 1 & -1 & -4 & 3 & 1 & -1 \\ 1 & 2 & 1 & -1 & -3 & 2 & 1 & 0 \\ 0 & 2 & 1 & -1 & -2 & 1 & 1 & 0 \\ 0 & 1 & 0 & 0 & -1 & 0 & 1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 1 & -1 & 1 & 1 & -1 & 1 \\ 0 & -2 & 1 & -1 & 1 & 1 & -1 & 2 \\ 0 & -2 & 1 & -2 & 2 & 2 & -2 & 2 \\ 0 & -3 & 2 & -3 & 3 & 2 & -3 & 4 \\ 0 & -3 & 2 & -2 & 2 & 2 & -3 & 3 \\ 0 & -2 & 2 & -2 & 2 & 1 & -2 & 2 \\ 0 & -1 & 1 & -1 & 1 & 1 & -2 & 2 \\ 0 & 0 & 1 & -1 & 0 & 1 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 1 & 1 & -1 & 1 & -1 & -1 & 1 & -1 \\ 0 & 2 & -1 & 1 & -1 & -1 & 1 & -2 \\ 0 & 2 & -1 & 2 & -2 & -2 & 2 & -2 \\ 0 & 3 & -2 & 3 & -3 & -2 & 3 & -4 \\ 0 & 3 & -2 & 2 & -2 & -2 & 3 & -3 \\ 0 & 2 & -2 & 2 & -2 & -1 & 2 & -2 \\ 0 & 1 & -1 & 1 & -1 & -1 & 2 & -2 \\ 0 & 0 & -1 & 1 & 0 & -1 & 1 & -1 \end{pmatrix}, \\
\begin{pmatrix} 0 & -1 & -1 & 0 & 2 & -1 & 0 & 0 \\ -1 & -2 & 0 & 0 & 3 & -2 & 0 & 0 \\ 0 & -2 & -1 & 0 & 4 & -3 & 0 & 0 \\ -1 & -3 & -1 & 0 & 6 & -4 & -1 & 1 \\ -1 & -3 & -1 & 1 & 4 & -3 & -1 & 1 \\ -1 & -2 & -1 & 1 & 3 & -2 & -1 & 0 \\ 0 & -2 & -1 & 1 & 2 & -1 & -1 & 0 \\ 0 & -1 & 0 & 0 & 1 & 0 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 1 & 0 & -1 & 2 & -1 & -1 \\ 1 & -1 & 2 & -1 & -1 & 2 & -1 & -1 \\ 1 & -2 & 2 & -1 & -1 & 3 & -1 & -2 \\ 1 & -2 & 4 & -2 & -2 & 4 & -1 & -3 \\ 1 & -1 & 3 & -2 & -1 & 3 & -1 & -3 \\ 0 & -1 & 3 & -2 & 0 & 2 & -1 & -2 \\ 0 & 0 & 2 & -2 & 0 & 2 & -1 & -1 \\ 0 & 0 & 1 & -1 & 0 & 1 & 0 & -1 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 1 & 0 & -1 & 0 & 0 & 2 \\ -1 & 0 & 0 & 1 & -2 & 1 & -1 & 3 \\ -2 & 1 & 1 & 0 & -2 & 1 & -1 & 4 \\ -2 & 1 & 1 & 0 & -3 & 2 & -2 & 6 \\ -1 & 1 & 1 & 0 & -3 & 2 & -2 & 5 \\ 0 & 1 & 0 & 0 & -2 & 1 & -1 & 4 \\ 0 & 1 & 0 & 0 & -1 & 0 & -1 & 3 \\ 0 & 1 & 0 & 0 & -1 & 0 & 0 & 1 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} 0 & 1 & 0 & -1 & 1 & 0 & 0 & 0 \\ 1 & 1 & -1 & -1 & 1 & 0 & 1 & 0 \\ 1 & 1 & -1 & -1 & 1 & 1 & 0 & 0 \\ 2 & 1 & -2 & -1 & 2 & 0 & 1 & 0 \\ 1 & 0 & -1 & -1 & 2 & 0 & 1 & 0 \\ 1 & 0 & 0 & -1 & 1 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} -1 & -2 & 0 & 1 & 1 & -1 & 0 & 0 \\ -1 & -3 & -1 & 2 & 1 & 0 & -1 & 0 \\ -2 & -3 & -1 & 2 & 2 & -1 & -1 & 0 \\ -2 & -5 & -2 & 3 & 3 & -1 & -2 & 1 \\ -1 & -4 & -2 & 3 & 2 & -1 & -2 & 1 \\ 0 & -3 & -2 & 2 & 2 & -1 & -1 & 0 \\ 0 & -2 & -1 & 1 & 2 & -1 & -1 & 0 \\ 0 & -1 & 0 & 0 & 1 & 0 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 1 & -1 & 0 & 1 & -1 & -1 \\ 0 & 1 & 2 & -2 & 0 & 2 & -2 & -1 \\ 0 & 0 & 3 & -2 & 0 & 2 & -2 & -2 \\ 0 & 1 & 4 & -3 & -1 & 4 & -3 & -3 \\ 0 & 1 & 3 & -3 & 0 & 3 & -2 & -3 \\ 0 & 0 & 2 & -2 & 0 & 3 & -2 & -2 \\ 0 & 0 & 2 & -2 & 0 & 2 & -1 & -1 \\ 0 & 0 & 1 & -1 & 0 & 1 & 0 & -1 \end{pmatrix}, \\
\begin{pmatrix} 0 & 0 & 0 & -1 & 1 & 0 & 1 & 0 \\ -1 & 0 & 1 & -1 & 1 & -1 & 2 & 0 \\ 0 & 0 & 1 & -2 & 2 & -1 & 2 & 0 \\ -1 & 0 & 1 & -2 & 3 & -2 & 3 & 0 \\ -1 & -1 & 1 & -1 & 2 & -1 & 2 & 0 \\ -1 & 0 & 1 & -1 & 1 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 2 & -1 & 0 & 0 & -1 & 1 & -1 \\ 1 & 2 & -2 & 0 & 0 & -1 & 2 & -2 \\ 1 & 3 & -3 & 1 & -1 & -1 & 2 & -2 \\ 2 & 4 & -4 & 1 & -1 & -2 & 4 & -4 \\ 1 & 3 & -3 & 1 & -1 & -2 & 4 & -3 \\ 1 & 2 & -2 & 1 & -1 & -2 & 3 & -2 \\ 0 & 1 & -1 & 1 & -1 & -1 & 2 & -2 \\ 0 & 0 & -1 & 1 & 0 & -1 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 0 & 1 & -2 & 1 & -1 & 2 \\ 1 & 0 & 0 & 1 & -2 & 0 & -1 & 3 \\ 1 & 0 & 0 & 1 & -3 & 1 & -1 & 4 \\ 1 & 0 & 1 & 1 & -4 & 1 & -2 & 6 \\ 1 & 1 & 1 & 0 & -3 & 1 & -2 & 5 \\ 0 & 1 & 1 & 0 & -2 & 0 & -1 & 4 \\ 0 & 1 & 0 & 0 & -1 & 0 & -1 & 3 \\ 0 & 1 & 0 & 0 & -1 & 0 & 0 & 1 \end{pmatrix}, \\
\begin{pmatrix} 0 & 0 & 0 & -1 & 2 & -1 & 1 & -2 \\ -1 & 0 & 0 & -1 & 2 & 0 & 1 & -3 \\ -1 & 0 & 0 & -1 & 3 & -1 & 1 & -4 \\ -1 & 0 & -1 & -1 & 4 & -1 & 2 & -6 \\ -1 & -1 & -1 & 0 & 3 & -1 & 2 & -5 \\ 0 & -1 & -1 & 0 & 2 & 0 & 1 & -4 \\ 0 & -1 & 0 & 0 & 1 & 0 & 1 & -3 \\ 0 & -1 & 0 & 0 & 1 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & -2 & 1 & 0 & 0 & 1 & -1 & 1 \\ -1 & -2 & 2 & 0 & 0 & 1 & -2 & 2 \\ -1 & -3 & 3 & -1 & 1 & 1 & -2 & 2 \\ -2 & -4 & 4 & -1 & 1 & 2 & -4 & 4 \\ -1 & -3 & 3 & -1 & 1 & 2 & -4 & 3 \\ -1 & -2 & 2 & -1 & 1 & 2 & -3 & 2 \\ 0 & -1 & 1 & -1 & 1 & 1 & -2 & 2 \\ 0 & 0 & 1 & -1 & 0 & 1 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 1 & 2 & 0 & -1 & -1 & 1 & 0 & 0 \\ 1 & 3 & 1 & -2 & -1 & 0 & 1 & 0 \\ 2 & 3 & 1 & -2 & -2 & 1 & 1 & 0 \\ 2 & 5 & 2 & -3 & -3 & 1 & 2 & -1 \\ 1 & 4 & 2 & -3 & -2 & 1 & 2 & -1 \\ 0 & 3 & 2 & -2 & -2 & 1 & 1 & 0 \\ 0 & 2 & 1 & -1 & -2 & 1 & 1 & 0 \\ 0 & 1 & 0 & 0 & -1 & 0 & 1 & 0 \end{pmatrix}, \\
\begin{pmatrix} 0 & 0 & 0 & 1 & -1 & 0 & -1 & 0 \\ 1 & 0 & -1 & 1 & -1 & 1 & -2 & 0 \\ 0 & 0 & -1 & 2 & -2 & 1 & -2 & 0 \\ 1 & 0 & -1 & 2 & -3 & 2 & -3 & 0 \\ 1 & 1 & -1 & 1 & -2 & 1 & -2 & 0 \\ 1 & 0 & -1 & 1 & -1 & 0 & -1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & -1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} -1 & 0 & -1 & 1 & 0 & -1 & 1 & 1 \\ 0 & -1 & -2 & 2 & 0 & -2 & 2 & 1 \\ 0 & 0 & -3 & 2 & 0 & -2 & 2 & 2 \\ 0 & -1 & -4 & 3 & 1 & -4 & 3 & 3 \\ 0 & -1 & -3 & 3 & 0 & -3 & 2 & 3 \\ 0 & 0 & -2 & 2 & 0 & -3 & 2 & 2 \\ 0 & 0 & -2 & 2 & 0 & -2 & 1 & 1 \\ 0 & 0 & -1 & 1 & 0 & -1 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 1 & -1 & 1 & -1 & 0 & 1 & -1 & 1 \\ 2 & -1 & 0 & -1 & 0 & 2 & -2 & 1 \\ 2 & -2 & 1 & -2 & 1 & 2 & -2 & 1 \\ 3 & -2 & 1 & -3 & 1 & 3 & -3 & 2 \\ 3 & -1 & 1 & -3 & 1 & 2 & -2 & 1 \\ 3 & -1 & 0 & -2 & 1 & 1 & -1 & 1 \\ 2 & 0 & 0 & -2 & 1 & 1 & -1 & 1 \\ 1 & 0 & 0 & -1 & 0 & 1 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 1 & 1 & -1 & 0 & -1 & 1 & 1 & -1 \\ 0 & 1 & -1 & 0 & -1 & 2 & 1 & -2 \\ 1 & 1 & -1 & 0 & -2 & 3 & 1 & -2 \\ 1 & 1 & -2 & 1 & -3 & 4 & 2 & -4 \\ 1 & 0 & -2 & 1 & -2 & 3 & 2 & -3 \\ 1 & 0 & -2 & 1 & -2 & 3 & 1 & -2 \\ 0 & 0 & -1 & 1 & -2 & 2 & 1 & -1 \\ 0 & 0 & -1 & 1 & -1 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 0 & -1 & 1 & 0 & 0 & -1 & 2 \\ -2 & 0 & 0 & 1 & 0 & 0 & -2 & 3 \\ -2 & 1 & -1 & 1 & 0 & 0 & -2 & 4 \\ -3 & 1 & -1 & 1 & 1 & 0 & -4 & 6 \\ -2 & 1 & -1 & 1 & 0 & 1 & -4 & 5 \\ -2 & 1 & -1 & 1 & 0 & 1 & -3 & 3 \\ -1 & 1 & -1 & 1 & 0 & 0 & -2 & 2 \\ -1 & 1 & 0 & 0 & 0 & 0 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 0 & 0 & 2 & -2 & 1 & -1 \\ 1 & -2 & -1 & 1 & 2 & -3 & 2 & -1 \\ 1 & -2 & -1 & 1 & 3 & -4 & 2 & -2 \\ 2 & -3 & -2 & 2 & 4 & -6 & 3 & -2 \\ 1 & -3 & -1 & 2 & 3 & -5 & 2 & -1 \\ 1 & -2 & 0 & 1 & 2 & -4 & 2 & -1 \\ 1 & -2 & 0 & 1 & 1 & -2 & 1 & -1 \\ 1 & -1 & 0 & 0 & 1 & -1 & 0 & 0 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} -1 & 1 & 1 & 0 & -1 & 0 & 0 & -1 \\ -1 & 2 & 2 & -1 & -1 & -1 & 1 & -1 \\ -2 & 2 & 2 & 0 & -2 & -1 & 1 & -1 \\ -3 & 3 & 4 & -1 & -3 & -1 & 2 & -2 \\ -3 & 3 & 3 & -1 & -2 & -1 & 2 & -2 \\ -3 & 2 & 3 & -1 & -1 & -1 & 1 & -1 \\ -2 & 1 & 2 & -1 & 0 & -1 & 1 & -1 \\ -1 & 0 & 1 & 0 & 0 & -1 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 1 & -1 & -1 & 0 & 1 & 0 & 0 & 1 \\ 1 & -2 & -2 & 1 & 1 & 1 & -1 & 1 \\ 2 & -2 & -2 & 0 & 2 & 1 & -1 & 1 \\ 3 & -3 & -4 & 1 & 3 & 1 & -2 & 2 \\ 3 & -3 & -3 & 1 & 2 & 1 & -2 & 2 \\ 3 & -2 & -3 & 1 & 1 & 1 & -1 & 1 \\ 2 & -1 & -2 & 1 & 0 & 1 & -1 & 1 \\ 1 & 0 & -1 & 0 & 0 & 1 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 0 & 0 & -2 & 2 & -1 & 1 \\ -1 & 2 & 1 & -1 & -2 & 3 & -2 & 1 \\ -1 & 2 & 1 & -1 & -3 & 4 & -2 & 2 \\ -2 & 3 & 2 & -2 & -4 & 6 & -3 & 2 \\ -1 & 3 & 1 & -2 & -3 & 5 & -2 & 1 \\ -1 & 2 & 0 & -1 & -2 & 4 & -2 & 1 \\ -1 & 2 & 0 & -1 & -1 & 2 & -1 & 1 \\ -1 & 1 & 0 & 0 & -1 & 1 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} -1 & 1 & -1 & 1 & 0 & -1 & 1 & -1 \\ -2 & 1 & 0 & 1 & 0 & -2 & 2 & -1 \\ -2 & 2 & -1 & 2 & -1 & -2 & 2 & -1 \\ -3 & 2 & -1 & 3 & -1 & -3 & 3 & -2 \\ -3 & 1 & -1 & 3 & -1 & -2 & 2 & -1 \\ -3 & 1 & 0 & 2 & -1 & -1 & 1 & -1 \\ -2 & 0 & 0 & 2 & -1 & -1 & 1 & -1 \\ -1 & 0 & 0 & 1 & 0 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 1 & -1 & 0 & 0 & 1 & -2 \\ 2 & 0 & 0 & -1 & 0 & 0 & 2 & -3 \\ 2 & -1 & 1 & -1 & 0 & 0 & 2 & -4 \\ 3 & -1 & 1 & -1 & -1 & 0 & 4 & -6 \\ 2 & -1 & 1 & -1 & 0 & -1 & 4 & -5 \\ 2 & -1 & 1 & -1 & 0 & -1 & 3 & -3 \\ 1 & -1 & 1 & -1 & 0 & 0 & 2 & -2 \\ 1 & -1 & 0 & 0 & 0 & 0 & 1 & -1 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 1 & 0 & 1 & -1 & -1 & 1 \\ 0 & -1 & 1 & 0 & 1 & -2 & -1 & 2 \\ -1 & -1 & 1 & 0 & 2 & -3 & -1 & 2 \\ -1 & -1 & 2 & -1 & 3 & -4 & -2 & 4 \\ -1 & 0 & 2 & -1 & 2 & -3 & -2 & 3 \\ -1 & 0 & 2 & -1 & 2 & -3 & -1 & 2 \\ 0 & 0 & 1 & -1 & 2 & -2 & -1 & 1 \\ 0 & 0 & 1 & -1 & 1 & -1 & 0 & 0 \end{pmatrix}.$$

The character table of G^{s_6} :

	10										20													
$\chi_6^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
$\chi_6^{(2)}$	1	A	B	/A	/B	/B	/A	1	B	A	/A	1	A	/B	B	/B	/A	1	B	A	A	B	/B	1
$\chi_6^{(3)}$	1	B	/A	/B	A	A	/B	1	/A	B	/B	1	B	A	/A	A	/B	1	/A	B	B	/A	A	1
$\chi_6^{(4)}$	1	/B	A	B	/A	/A	B	1	A	/B	B	1	/B	/A	A	/A	B	1	A	/B	/B	A	/A	1
$\chi_6^{(5)}$	1	/A	/B	A	B	B	A	1	/B	/A	A	1	/A	B	/B	B	A	1	/B	/A	/A	/B	B	1
$\chi_6^{(6)}$	2	2	2	2	2	-2	-2	-2	-2	-2	.	.	.	.	.	M	M	M	M	M	-M	-M	-M	-M
$\chi_6^{(7)}$	2	2	2	2	2	-2	-2	-2	-2	-2	.	.	.	.	.	*M	*M	*M	*M	*M	-*M	-*M	-*M	-*M
$\chi_6^{(8)}$	2	C	D	/C	/D	-/D	-/C	-2	-D	-C	.	.	.	.	.	N	/Q	M	/N	Q	-Q	-/N	-N	-M
$\chi_6^{(9)}$	2	D	/C	/D	C	-C	-/D	-2	-/C	-D	.	.	.	.	.	O	P	*M	/O	/P	-/P	-/O	-O	-*M
$\chi_6^{(10)}$	2	/D	C	D	/C	-/C	-D	-2	-C	-/D	.	.	.	.	.	/O	/P	*M	O	P	-P	-O	-/O	-*M
$\chi_6^{(11)}$	2	/C	/D	C	D	-D	-C	-2	-/D	-/C	.	.	.	.	.	/N	Q	M	N	/Q	-/Q	-N	-/N	-M
$\chi_6^{(12)}$	2	C	D	/C	/D	-/D	-/C	-2	-D	-C	.	.	.	.	.	P	/O	*M	/P	O	-O	-/P	-P	-*M
$\chi_6^{(13)}$	2	D	/C	/D	C	-C	-/D	-2	-/C	-D	.	.	.	.	.	Q	N	M	/Q	/N	-/N	-/Q	-Q	-M
$\chi_6^{(14)}$	2	/D	C	D	/C	-/C	-D	-2	-C	-/D	.	.	.	.	.	/Q	/N	M	Q	N	-N	-Q	-/Q	-M
$\chi_6^{(15)}$	2	/C	/D	C	D	-D	-C	-2	-/D	-/C	.	.	.	.	.	/P	O	*M	P	/O	-/O	-P	-/P	-*M
$\chi_6^{(16)}$	3	3	3	3	3	3	3	3	3	3	-1	-1	-1	-1	-1	*M	*M	*M	*M	*M	*M	*M	*M	*M
$\chi_6^{(17)}$	3	3	3	3	3	3	3	3	3	3	-1	-1	-1	-1	-1	M	M	M	M	M	M	M	M	M
$\chi_6^{(18)}$	3	E	F	/E	/F	/F	/E	3	F	E	-/A	-1	-A	-/B	-B	P	/O	*M	/P	O	O	/P	P	*M
$\chi_6^{(19)}$	3	F	/E	/F	E	E	/F	3	/E	F	-/B	-1	-B	-A	-/A	Q	N	M	/Q	/N	/N	/Q	Q	M
$\chi_6^{(20)}$	3	/F	E	F	/E	/E	F	3	E	/F	-B	-1	-/B	-/A	-A	/Q	/N	M	Q	N	N	Q	/Q	M
$\chi_6^{(21)}$	3	/E	/F	E	F	F	E	3	/F	/E	-A	-1	-/A	-B	-/B	/P	O	*M	P	/O	/O	P	/P	*M
$\chi_6^{(22)}$	3	E	F	/E	/F	/F	/E	3	F	E	-/A	-1	-A	-/B	-B	N	/Q	M	/N	Q	Q	/N	N	M
$\chi_6^{(23)}$	3	F	/E	/F	E	E	/F	3	/E	F	-/B	-1	-B	-A	-/A	O	P	*M	/O	/P	/P	/O	O	*M
$\chi_6^{(24)}$	3	/F	E	F	/E	/E	F	3	E	/F	-B	-1	-/B	-/A	-A	/O	/P	*M	O	P	P	O	/O	*M
$\chi_6^{(25)}$	3	/E	/F	E	F	F	E	3	/F	/E	-A	-1	-/A	-B	-/B	/N	Q	M	N	/Q	/Q	N	/N	M
$\chi_6^{(26)}$	4	4	4	4	4	4	4	4	4	4	.	.	.	.	.	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_6^{(27)}$	4	4	4	4	4	-4	-4	-4	-4	-4	.	.	.	.	.	1	1	1	1	1	-1	-1	-1	-1
$\chi_6^{(28)}$	4	G	H	/G	/H	/H	/G	4	H	G	.	.	.	.	.	-/B	-/A	-1	-B	-A	-A	-B	-/B	-1
$\chi_6^{(29)}$	4	H	/G	/H	G	G	/H	4	/G	H	.	.	.	.	.	-A	-/B	-1	-/A	-B	-B	-/A	-A	-1
$\chi_6^{(30)}$	4	/H	G	H	/G	/G	H	4	G	/H	.	.	.	.	.	-/A	-B	-1	-A	-/B	-/B	-A	-/A	-1
$\chi_6^{(31)}$	4	/G	/H	G	H	H	G	4	/H	/G	.	.	.	.	.	-B	-A	-1	-/B	-/A	-/A	-/B	-B	-1
$\chi_6^{(32)}$	4	G	H	/G	/H	-/H	-/G	-4	-H	-G	.	.	.	.	.	/B	/A	1	B	A	-A	-B	-/B	-1
$\chi_6^{(33)}$	4	H	/G	/H	G	-G	-/H	-4	-/G	-H	.	.	.	.	.	A	/B	1	/A	B	-B	-/A	-A	-1
$\chi_6^{(34)}$	4	/H	G	H	/G	-/G	-H	-4	-G	-/H	.	.	.	.	.	/A	B	1	A	/B	-/B	-A	-/A	-1
$\chi_6^{(35)}$	4	/G	/H	G	H	-H	-G	-4	-/H	-/G	.	.	.	.	.	B	A	1	/B	/A	-/A	-/B	-B	-1
$\chi_6^{(36)}$	5	5	5	5	5	5	5	5	5	5	1	1	1	1	1	.	.	.	.	.	.	.	.	.
$\chi_6^{(37)}$	5	I	J	/I	/J	/J	/I	5	J	I	/A	1	A	/B	B	.	.	.	.	.	.	.	.	.
$\chi_6^{(38)}$	5	J	/I	/J	I	I	/J	5	/I	J	/B	1	B	A	/A	.	.	.	.	.	.	.	.	.
$\chi_6^{(39)}$	5	/J	I	J	/I	/I	J	5	I	/J	B	1	/B	/A	A	.	.	.	.	.	.	.	.	.
$\chi_6^{(40)}$	5	/I	/J	I	J	J	I	5	/J	/I	A	1	/A	B	/B	.	.	.	.	.	.	.	.	.
$\chi_6^{(41)}$	6	6	6	6	6	-6	-6	-6	-6	-6	.	.	.	.	.	-1	-1	-1	-1	-1	1	1	1	1
$\chi_6^{(42)}$	6	K	L	/K	/L	-/L	-/K	-6	-L	-K	.	.	.	.	.	-/B	-/A	-1	-B	-A	A	B	/B	1
$\chi_6^{(43)}$	6	L	/K	/L	K	-K	-/L	-6	-/K	-L	.	.	.	.	.	-A	-/B	-1	-/A	-B	B	/A	A	1
$\chi_6^{(44)}$	6	/L	K	L	/K	-/K	-L	-6	-K	-/L	.	.	.	.	.	-/A	-B	-1	-A	-/B	/B	A	/A	1
$\chi_6^{(45)}$	6	/K	/L	K	L	-L	-K	-6	-/L	-/K	.	.	.	.	.	-B	-A	-1	-/B	-/A	/A	/B	B	1

	30										40										
$\chi_6^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
$\chi_6^{(2)}$	/A	A	B	/B	1	/A	/A	1	A	/B	B	B	/B	/A	A	1	1	A	B	/A	/B
$\chi_6^{(3)}$	/B	B	/A	A	1	/B	/B	1	B	A	/A	/A	A	/B	B	1	1	B	/A	/B	A
$\chi_6^{(4)}$	B	/B	A	/A	1	B	B	1	/B	/A	A	A	/A	B	/B	1	1	/B	A	B	/A
$\chi_6^{(5)}$	A	/A	/B	B	1	A	A	1	/A	B	/B	/B	B	A	/A	1	1	/A	/B	A	B
$\chi_6^{(6)}$	-M	*M	*M	*M	*M	*M	*M	*M	*M	*M	*M	*M	-1	-1	-1	-1	1	1	1	1	1
$\chi_6^{(7)}$	*M	-M	-M	-M	-M	-M	M	M	M	M	M	M	-1	-1	-1	-1	1	1	1	1	1
$\chi_6^{(8)}$	-/Q	-O	-/P	-P	*M	-/O	/O	*M	O	P	/P	-B	-/B	-/A	-A	-1	1	A	B	/A	/B
$\chi_6^{(9)}$	-P	-/N	-/Q	-Q	-M	-N	N	M	/N	Q	/Q	-/A	-A	-/B	-B	-1	1	B	/A	/B	A
$\chi_6^{(10)}$	-/P	-N	-Q	-/Q	-M	-/N	/N	M	N	/Q	Q	-A	-/A	-B	-/B	-1	1	/B	A	B	/A
$\chi_6^{(11)}$	-Q	-/O	-P	-/P	*M	-O	O	*M	/O	/P	P	-/B	-B	-A	-/A	-1	1	/A	/B	A	B
$\chi_6^{(12)}$	-/O	-Q	-/N	-N	-M	-/Q	/Q	M	Q	N	/N	-B	-/B	-/A	-A	-1	1	A	B	/A	/B
$\chi_6^{(13)}$	-N	-/P	-/O	-O	*M	-P	P	*M	/P	O	/O	-/A	-A	-/B	-B	-1	1	B	/A	/B	A
$\chi_6^{(14)}$	-/N	-P	-O	-/O	*M	-/P	/P	*M	P	/O	O	-A	-/A	-B	-/B	-1	1	/B	A	B	/A
$\chi_6^{(15)}$	-O	-/Q	-N	-/N	-M	-Q	Q	M	/Q	/N	N	-/B	-B	-A	-/A	-1	1	/A	/B	A	B
$\chi_6^{(16)}$	*M	M	M	M	M	M	M	M	M	M	M	.	.	.	.	.	.	.	.	.	.
$\chi_6^{(17)}$	M	*M	*M	*M	*M	*M	*M	*M	*M	*M	*M	.	.	.	.	.	.	.	.	.	.
$\chi_6^{(18)}$	/O	Q	/N	N	M	/Q	/Q	M	Q	N	/N	.	.	.	.	.	.	.	.	.	.
$\chi_6^{(19)}$	N	/P	/O	O	*M	P	P	*M	/P	O	/O	.	.	.	.	.	.	.	.	.	.
$\chi_6^{(20)}$	/N	P	O	/O	*M	/P	/P	*M	P	/O	O	.	.	.	.	.	.	.	.	.	.
$\chi_6^{(21)}$	O	/Q	N	/N	M	Q	Q	M	/Q	/N	N	.	.	.	.	.	.	.	.	.	.
$\chi_6^{(22)}$	/Q	O	/P	P	*M	/O	/O	*M	O	P	/P	.	.	.	.	.	.	.	.	.	.
$\chi_6^{(23)}$	P	/N	/Q	Q	M	N	N	M	/N	Q	/Q	.	.	.	.	.	.	.	.	.	.
$\chi_6^{(24)}$	/P	N	Q	/Q	M	/N	/N	M	N	/Q	Q	.	.	.	.	.	.	.	.	.	.
$\chi_6^{(25)}$	Q	/O	P	/P	*M	O	O	*M	/O	/P	P	.	.	.	.	.	.	.	.	.	.
$\chi_6^{(26)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	1
$\chi_6^{(27)}$	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1
$\chi_6^{(28)}$	-/A	-A	-B	-/B	-1	-/A	-/A	-1	-A	-/B	-B	B	/B	/A	A	1	1	A	B	/A	/B
$\chi_6^{(29)}$	-/B	-B	-/A	-A	-1	-/B	-/B	-1	-B	-A	-/A	/A	A	/B	B	1	1	B	/A	/B	A
$\chi_6^{(30)}$	-B	-/B	-A	-/A	-1	-B	-B	-1	-/B	-/A	-A	A	/A	B	/B	1	1	/B	A	B	/A
$\chi_6^{(31)}$	-A	-/A	-/B	-B	-1	-A	-A	-1	-/A	-B	-/B	/B	B	A	/A	1	1	/A	/B	A	B
$\chi_6^{(32)}$	-/A	-A	-B	-/B	-1	-/A	/A	1	A	/B	B	B	/B	/A	A	1	-1	-A	-B	-/A	-/B
$\chi_6^{(33)}$	-/B	-B	-/A	-A	-1	-/B	/B	1	B	A	/A	/A	A	/B	B	1	-1	-B	-/A	-/B	-A
$\chi_6^{(34)}$	-B	-/B	-A	-/A	-1	-B	B	1	/B	/A	A	A	/A	B	/B	1	-1	-/B	-A	-B	-/A
$\chi_6^{(35)}$	-A	-/A	-/B	-B	-1	-A	A	1	/A	B	/B	/B	B	A	/A	1	-1	-/A	-/B	-A	-B
$\chi_6^{(36)}$	.	.	.	.	.	.	.	.	.	.	.	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_6^{(37)}$	.	.	.	.	.	.	.	.	.	.	.	-B	-/B	-/A	-A	-1	-1	-A	-B	-/A	-/B
$\chi_6^{(38)}$	.	.	.	.	.	.	.	.	.	.	.	-/A	-A	-/B	-B	-1	-1	-B	-/A	-/B	-A
$\chi_6^{(39)}$	.	.	.	.	.	.	.	.	.	.	.	-A	-/A	-B	-/B	-1	-1	-/B	-A	-B	-/A
$\chi_6^{(40)}$	.	.	.	.	.	.	.	.	.	.	.	-/B	-B	-A	-/A	-1	-1	-/A	-/B	-A	-B
$\chi_6^{(41)}$	1	1	1	1	1	1	-1	-1	-1	-1	-1	.	.	.	.	.	.	.	.	.	.
$\chi_6^{(42)}$	/A	A	B	/B	1	/A	-/A	-1	-A	-/B	-B	.	.	.	.	.	.	.	.	.	.
$\chi_6^{(43)}$	/B	B	/A	A	1	/B	-/B	-1	-B	-A	-/A	.	.	.	.	.	.	.	.	.	.
$\chi_6^{(44)}$	B	/B	A	/A	1	B	-B	-1	-/B	-/A	-A	.	.	.	.	.	.	.	.	.	.
$\chi_6^{(45)}$	A	/A	/B	B	1	A	-A	-1	-/A	-B	-/B	.	.	.	.	.	.	.	.	.	.

$$\begin{pmatrix} 1 & 0 & 0 & -1 & 0 & 1 & 0 & -1 \\ 2 & -1 & 0 & -1 & 0 & 2 & -1 & -1 \\ 2 & 0 & 0 & -2 & 0 & 3 & -1 & -2 \\ 4 & -1 & -1 & -2 & 0 & 4 & -1 & -3 \\ 4 & 0 & -1 & -2 & 0 & 3 & -1 & -2 \\ 3 & 0 & -1 & -1 & -1 & 3 & -1 & -1 \\ 2 & 0 & -1 & 0 & -1 & 2 & -1 & -1 \\ 1 & 0 & 0 & 0 & -1 & 1 & 0 & -1 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 0 & 1 & 0 & -1 & 0 & 1 \\ -2 & 1 & 0 & 1 & 0 & -2 & 1 & 1 \\ -2 & 0 & 0 & 2 & 0 & -3 & 1 & 2 \\ -4 & 1 & 1 & 2 & 0 & -4 & 1 & 3 \\ -4 & 0 & 1 & 2 & 0 & -3 & 1 & 2 \\ -3 & 0 & 1 & 1 & 1 & -3 & 1 & 1 \\ -2 & 0 & 1 & 0 & 1 & -2 & 1 & 1 \\ -1 & 0 & 0 & 0 & 1 & -1 & 0 & 1 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 1 & 0 & 0 & 0 & 1 & -2 \\ -1 & -2 & 2 & 0 & 0 & -1 & 2 & -2 \\ -1 & -2 & 2 & 0 & 0 & -1 & 2 & -3 \\ -2 & -3 & 4 & 0 & -1 & -1 & 3 & -4 \\ -2 & -3 & 3 & 1 & -1 & -1 & 2 & -3 \\ -2 & -2 & 3 & 0 & 0 & -1 & 1 & -2 \\ -1 & -2 & 2 & 0 & 0 & 0 & 0 & -1 \\ 0 & -1 & 1 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \\
\begin{pmatrix} 1 & 1 & -1 & 0 & 0 & 0 & -1 & 2 \\ 1 & 2 & -2 & 0 & 0 & 1 & -2 & 2 \\ 1 & 2 & -2 & 0 & 0 & 1 & -2 & 3 \\ 2 & 3 & -4 & 0 & 1 & 1 & -3 & 4 \\ 2 & 3 & -3 & -1 & 1 & 1 & -2 & 3 \\ 2 & 2 & -3 & 0 & 0 & 1 & -1 & 2 \\ 1 & 2 & -2 & 0 & 0 & 0 & 0 & 1 \\ 0 & 1 & -1 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} -1 & 1 & 2 & -1 & 0 & -1 & 1 & -1 \\ -1 & 1 & 3 & -1 & -1 & -1 & 1 & 0 \\ -2 & 2 & 4 & -2 & 0 & -2 & 1 & 0 \\ -2 & 3 & 6 & -3 & -1 & -2 & 1 & 0 \\ -2 & 2 & 5 & -2 & -1 & -2 & 1 & 0 \\ -2 & 2 & 4 & -2 & -1 & -1 & 1 & 0 \\ -1 & 1 & 3 & -2 & 0 & -1 & 1 & 0 \\ -1 & 0 & 2 & -1 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 0 & 0 & 1 & -2 & 1 & 1 \\ -1 & 0 & 1 & -1 & 2 & -2 & 1 & 1 \\ -1 & -1 & 1 & 0 & 2 & -3 & 1 & 2 \\ -2 & -1 & 1 & 0 & 3 & -4 & 2 & 2 \\ -1 & -1 & 0 & 0 & 3 & -3 & 1 & 2 \\ -1 & -1 & 0 & 0 & 2 & -2 & 1 & 2 \\ -1 & -1 & 0 & 0 & 2 & -2 & 1 & 1 \\ -1 & 0 & 0 & 0 & 1 & -1 & 0 & 1 \end{pmatrix}, \\
\begin{pmatrix} 0 & 0 & 0 & 0 & -1 & 2 & -1 & -1 \\ 1 & 0 & -1 & 1 & -2 & 2 & -1 & -1 \\ 1 & 1 & -1 & 0 & -2 & 3 & -1 & -2 \\ 2 & 1 & -1 & 0 & -3 & 4 & -2 & -2 \\ 1 & 1 & 0 & 0 & -3 & 3 & -1 & -2 \\ 1 & 1 & 0 & 0 & -2 & 2 & -1 & -2 \\ 1 & 1 & 0 & 0 & -2 & 2 & -1 & -1 \\ 1 & 0 & 0 & 0 & -1 & 1 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 0 & 0 & -2 & 2 & 0 & 0 \\ 1 & 1 & 0 & 0 & -3 & 2 & 1 & -1 \\ 2 & 1 & 0 & -1 & -3 & 3 & 1 & -1 \\ 3 & 2 & 0 & -1 & -5 & 4 & 1 & -1 \\ 2 & 1 & 1 & -1 & -4 & 3 & 1 & -1 \\ 2 & 1 & 1 & -1 & -3 & 2 & 1 & -1 \\ 1 & 1 & 1 & -1 & -2 & 1 & 1 & 0 \\ 1 & 0 & 0 & 0 & -1 & 0 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 1 & -1 & 2 & -1 & 0 & 0 \\ -1 & -1 & 1 & -1 & 3 & -2 & 0 & 1 \\ -1 & -1 & 2 & -2 & 4 & -2 & -1 & 1 \\ -1 & -1 & 2 & -3 & 6 & -3 & -1 & 2 \\ -1 & -1 & 1 & -2 & 5 & -2 & -1 & 1 \\ -1 & -1 & 1 & -2 & 4 & -1 & -1 & 1 \\ 0 & -1 & 0 & -1 & 3 & -1 & -1 & 1 \\ 0 & -1 & 0 & 0 & 1 & 0 & -1 & 1 \end{pmatrix}, \\
\begin{pmatrix} 0 & 1 & -1 & 1 & -2 & 1 & 0 & 0 \\ 1 & 1 & -1 & 1 & -3 & 2 & 0 & -1 \\ 1 & 1 & -2 & 2 & -4 & 2 & 1 & -1 \\ 1 & 1 & -2 & 3 & -6 & 3 & 1 & -2 \\ 1 & 1 & -1 & 2 & -5 & 2 & 1 & -1 \\ 1 & 1 & -1 & 2 & -4 & 1 & 1 & -1 \\ 0 & 1 & 0 & 1 & -3 & 1 & 1 & -1 \\ 0 & 1 & 0 & 0 & -1 & 0 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 0 & 1 & -1 & -1 & 0 & 0 \\ 1 & 1 & 0 & 1 & -1 & -1 & 0 & -1 \\ 1 & 2 & 0 & 1 & -1 & -2 & 0 & 0 \\ 2 & 3 & 0 & 1 & -1 & -3 & 0 & -1 \\ 2 & 2 & 0 & 1 & -1 & -3 & 1 & -1 \\ 2 & 2 & -1 & 1 & -1 & -2 & 1 & -1 \\ 1 & 2 & 0 & 0 & -1 & -1 & 1 & -1 \\ 0 & 1 & 0 & 0 & 0 & -1 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 0 & -1 & 1 & 1 & 0 & 0 \\ -1 & -1 & 0 & -1 & 1 & 1 & 0 & 1 \\ -1 & -2 & 0 & -1 & 1 & 2 & 0 & 0 \\ -2 & -3 & 0 & -1 & 1 & 3 & 0 & 1 \\ -2 & -2 & 0 & -1 & 1 & 3 & -1 & 1 \\ -2 & -2 & 1 & -1 & 1 & 2 & -1 & 1 \\ -1 & -2 & 0 & 0 & 1 & 1 & -1 & 1 \\ 0 & -1 & 0 & 0 & 0 & 1 & -1 & 1 \end{pmatrix}, \\
\begin{pmatrix} -1 & 0 & 1 & 0 & 0 & 1 & -2 & 0 \\ -1 & 0 & 1 & 1 & -1 & 1 & -3 & 1 \\ -2 & 0 & 2 & 1 & -1 & 1 & -3 & 0 \\ -3 & -1 & 3 & 2 & -2 & 2 & -5 & 1 \\ -3 & 0 & 3 & 1 & -2 & 2 & -4 & 1 \\ -2 & 0 & 2 & 1 & -2 & 2 & -3 & 0 \\ -1 & 0 & 1 & 1 & -2 & 2 & -2 & 0 \\ 0 & 0 & 1 & 0 & -1 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & -1 & 0 & 0 & -1 & 2 & 0 \\ 1 & 0 & -1 & -1 & 1 & -1 & 3 & -1 \\ 2 & 0 & -2 & -1 & 1 & -1 & 3 & 0 \\ 3 & 1 & -3 & -2 & 2 & -2 & 5 & -1 \\ 3 & 0 & -3 & -1 & 2 & -2 & 4 & -1 \\ 2 & 0 & -2 & -1 & 2 & -2 & 3 & 0 \\ 1 & 0 & -1 & -1 & 2 & -2 & 2 & 0 \\ 0 & 0 & -1 & 0 & 1 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 1 & 0 & 1 & -2 & 0 & 0 \\ 0 & -1 & 1 & 0 & 2 & -3 & 0 & 0 \\ -1 & -1 & 1 & 1 & 2 & -4 & 0 & 0 \\ -1 & -2 & 2 & 1 & 3 & -6 & 1 & -1 \\ 0 & -1 & 1 & 1 & 2 & -5 & 1 & -1 \\ 0 & -1 & 0 & 1 & 2 & -4 & 1 & -1 \\ 0 & -1 & 0 & 1 & 1 & -2 & 0 & -1 \\ 0 & 0 & 0 & 0 & 1 & -1 & 0 & -1 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} 1 & 0 & -1 & 0 & -1 & 2 & 0 & 0 \\ 0 & 1 & -1 & 0 & -2 & 3 & 0 & 0 \\ 1 & 1 & -1 & -1 & -2 & 4 & 0 & 0 \\ 1 & 2 & -2 & -1 & -3 & 6 & -1 & 1 \\ 0 & 1 & -1 & -1 & -2 & 5 & -1 & 1 \\ 0 & 1 & 0 & -1 & -2 & 4 & -1 & 1 \\ 0 & 1 & 0 & -1 & -1 & 2 & 0 & 1 \\ 0 & 0 & 0 & 0 & -1 & 1 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 1 & 0 & -1 & 1 & -1 & 1 \\ -1 & 1 & 2 & 0 & -2 & 1 & -1 & 1 \\ -1 & 0 & 3 & 0 & -2 & 1 & -1 & 1 \\ -2 & 0 & 4 & 1 & -4 & 2 & -2 & 2 \\ -2 & 0 & 4 & 0 & -3 & 2 & -2 & 2 \\ -1 & 0 & 3 & 0 & -3 & 2 & -1 & 1 \\ -1 & 0 & 2 & 0 & -2 & 1 & 0 & 1 \\ 0 & 0 & 1 & 0 & -1 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & -1 & 0 & 1 & -1 & 1 & -1 \\ 1 & -1 & -2 & 0 & 2 & -1 & 1 & -1 \\ 1 & 0 & -3 & 0 & 2 & -1 & 1 & -1 \\ 2 & 0 & -4 & -1 & 4 & -2 & 2 & -2 \\ 2 & 0 & -4 & 0 & 3 & -2 & 2 & -2 \\ 1 & 0 & -3 & 0 & 3 & -2 & 1 & -1 \\ 1 & 0 & -2 & 0 & 2 & -1 & 0 & -1 \\ 0 & 0 & -1 & 0 & 1 & 0 & 0 & -1 \end{pmatrix}, \\
\begin{pmatrix} 0 & 0 & -2 & 1 & 0 & 1 & -1 & 1 \\ -1 & 0 & -2 & 1 & 1 & 1 & -2 & 1 \\ 0 & 0 & -4 & 2 & 1 & 1 & -2 & 1 \\ -1 & 0 & -5 & 3 & 1 & 2 & -3 & 1 \\ -1 & 0 & -4 & 2 & 1 & 2 & -2 & 0 \\ 0 & 0 & -3 & 1 & 1 & 2 & -2 & 0 \\ 0 & 1 & -2 & 0 & 1 & 1 & -1 & 0 \\ 0 & 0 & -1 & 0 & 1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 2 & -1 & 0 & -1 & 1 & -1 \\ 1 & 0 & 2 & -1 & -1 & -1 & 2 & -1 \\ 0 & 0 & 4 & -2 & -1 & -1 & 2 & -1 \\ 1 & 0 & 5 & -3 & -1 & -2 & 3 & -1 \\ 1 & 0 & 4 & -2 & -1 & -2 & 2 & 0 \\ 0 & 0 & 3 & -1 & -1 & -2 & 2 & 0 \\ 0 & -1 & 2 & 0 & -1 & -1 & 1 & 0 \\ 0 & 0 & 1 & 0 & -1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 1 & -1 & -1 & 2 & -2 & 1 & 0 \\ 0 & 1 & -1 & -1 & 3 & -3 & 2 & -1 \\ 1 & 2 & -1 & -2 & 4 & -4 & 2 & -1 \\ 0 & 3 & -1 & -3 & 6 & -6 & 3 & -1 \\ 0 & 3 & -1 & -3 & 5 & -4 & 2 & -1 \\ 0 & 2 & 0 & -3 & 4 & -3 & 2 & -1 \\ 0 & 1 & 0 & -2 & 3 & -2 & 1 & 0 \\ 0 & 1 & 0 & -1 & 1 & -1 & 1 & 0 \end{pmatrix}, \\
\begin{pmatrix} -1 & -1 & 1 & 1 & -2 & 2 & -1 & 0 \\ 0 & -1 & 1 & 1 & -3 & 3 & -2 & 1 \\ -1 & -2 & 1 & 2 & -4 & 4 & -2 & 1 \\ 0 & -3 & 1 & 3 & -6 & 6 & -3 & 1 \\ 0 & -3 & 1 & 3 & -5 & 4 & -2 & 1 \\ 0 & -2 & 0 & 3 & -4 & 3 & -2 & 1 \\ 0 & -1 & 0 & 2 & -3 & 2 & -1 & 0 \\ 0 & -1 & 0 & 1 & -1 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ -1 & -1 & 0 & 1 & 0 & -1 & 0 & 0 \\ -1 & 0 & -1 & 1 & 0 & -1 & 0 & 0 \\ -2 & 0 & 0 & 1 & 0 & -2 & 0 & 0 \\ -1 & 0 & 0 & 1 & -1 & -1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & -1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & -1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 1 & 1 & 0 & -1 & 0 & 1 & 0 & 0 \\ 1 & 0 & 1 & -1 & 0 & 1 & 0 & 0 \\ 2 & 0 & 0 & -1 & 0 & 2 & 0 & 0 \\ 1 & 0 & 0 & -1 & 1 & 1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \\
\begin{pmatrix} -1 & -1 & 0 & 0 & 1 & 0 & 0 & 1 \\ -1 & -1 & 0 & 0 & 1 & 0 & 1 & 0 \\ -1 & -2 & 0 & 0 & 2 & 0 & 0 & 1 \\ -2 & -2 & 0 & 0 & 2 & 1 & 0 & 1 \\ -2 & -2 & 0 & 0 & 2 & 1 & 0 & 0 \\ -1 & -1 & 0 & -1 & 2 & 1 & 0 & 0 \\ -1 & -1 & 1 & -1 & 1 & 1 & 0 & 0 \\ -1 & 0 & 1 & -1 & 1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 1 & 0 & 0 & -1 & 0 & 0 & -1 \\ 1 & 1 & 0 & 0 & -1 & 0 & -1 & 0 \\ 1 & 2 & 0 & 0 & -2 & 0 & 0 & -1 \\ 2 & 2 & 0 & 0 & -2 & -1 & 0 & -1 \\ 2 & 2 & 0 & 0 & -2 & -1 & 0 & 0 \\ 1 & 1 & 0 & 1 & -2 & -1 & 0 & 0 \\ 1 & 1 & -1 & 1 & -1 & -1 & 0 & 0 \\ 1 & 0 & -1 & 1 & -1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 1 & 2 & -1 & -1 & 0 & 0 & 1 \\ -1 & 1 & 2 & 0 & -2 & -1 & 1 & 1 \\ -1 & 1 & 3 & -1 & -2 & -1 & 1 & 2 \\ -1 & 2 & 4 & -1 & -3 & -2 & 1 & 3 \\ -1 & 1 & 4 & -1 & -2 & -2 & 1 & 2 \\ -1 & 1 & 3 & -1 & -1 & -2 & 1 & 2 \\ 0 & 1 & 2 & -1 & -1 & -1 & 1 & 1 \\ 0 & 1 & 1 & -1 & 0 & -1 & 1 & 0 \end{pmatrix}, \\
\begin{pmatrix} 1 & -1 & -2 & 1 & 1 & 0 & 0 & -1 \\ 1 & -1 & -2 & 0 & 2 & 1 & -1 & -1 \\ 1 & -1 & -3 & 1 & 2 & 1 & -1 & -2 \\ 1 & -2 & -4 & 1 & 3 & 2 & -1 & -3 \\ 1 & -1 & -4 & 1 & 2 & 2 & -1 & -2 \\ 1 & -1 & -3 & 1 & 1 & 2 & -1 & -2 \\ 0 & -1 & -2 & 1 & 1 & 1 & -1 & -1 \\ 0 & -1 & -1 & 1 & 0 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 1 & 1 & -1 & 0 & 1 & -2 & 1 \\ -1 & 1 & 0 & 0 & -1 & 2 & -3 & 2 \\ -2 & 1 & 1 & -1 & 0 & 2 & -4 & 3 \\ -2 & 2 & 1 & -1 & -1 & 3 & -6 & 5 \\ -1 & 1 & 1 & -1 & -1 & 3 & -5 & 4 \\ -1 & 0 & 1 & 0 & -1 & 2 & -4 & 3 \\ 0 & 0 & 0 & 0 & 0 & 1 & -3 & 2 \\ 0 & 0 & 0 & 0 & 0 & 0 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 1 & -1 & -1 & 1 & 0 & -1 & 2 & -1 \\ 1 & -1 & 0 & 0 & 1 & -2 & 3 & -2 \\ 2 & -1 & -1 & 1 & 0 & -2 & 4 & -3 \\ 2 & -2 & -1 & 1 & 1 & -3 & 6 & -5 \\ 1 & -1 & -1 & 1 & 1 & -3 & 5 & -4 \\ 1 & 0 & -1 & 0 & 1 & -2 & 4 & -3 \\ 0 & 0 & 0 & 0 & 0 & -1 & 3 & -2 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & -1 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} 1 & -1 & -1 & 1 & 1 & -1 & -1 & 1 \\ 1 & 0 & -2 & 1 & 2 & -2 & -1 & 1 \\ 2 & -1 & -2 & 1 & 3 & -3 & -1 & 1 \\ 3 & -1 & -4 & 2 & 4 & -4 & -1 & 1 \\ 2 & -1 & -3 & 1 & 4 & -3 & -1 & 1 \\ 2 & -1 & -3 & 1 & 3 & -2 & -1 & 1 \\ 1 & -1 & -2 & 1 & 2 & -1 & -1 & 0 \\ 1 & 0 & -1 & 0 & 1 & 0 & -1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 1 & 1 & -1 & -1 & 1 & 1 & -1 \\ -1 & 0 & 2 & -1 & -2 & 2 & 1 & -1 \\ -2 & 1 & 2 & -1 & -3 & 3 & 1 & -1 \\ -3 & 1 & 4 & -2 & -4 & 4 & 1 & -1 \\ -2 & 1 & 3 & -1 & -4 & 3 & 1 & -1 \\ -2 & 1 & 3 & -1 & -3 & 2 & 1 & -1 \\ -1 & 1 & 2 & -1 & -2 & 1 & 1 & 0 \\ -1 & 0 & 1 & 0 & -1 & 0 & 1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 1 & 1 & -1 & 0 & 0 & -1 \\ -1 & -3 & 1 & 2 & -1 & 0 & 0 & -1 \\ -2 & -3 & 1 & 3 & -2 & 0 & 0 & -1 \\ -2 & -5 & 2 & 4 & -3 & 0 & 0 & -1 \\ -1 & -4 & 1 & 4 & -3 & 0 & 0 & -1 \\ -1 & -3 & 1 & 3 & -2 & 0 & -1 & 0 \\ 0 & -2 & 0 & 2 & -1 & 0 & -1 & 0 \\ 0 & -1 & 0 & 1 & 0 & -1 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 1 & 1 & -1 & -1 & 1 & 0 & 0 & 1 \\ 1 & 3 & -1 & -2 & 1 & 0 & 0 & 1 \\ 2 & 3 & -1 & -3 & 2 & 0 & 0 & 1 \\ 2 & 5 & -2 & -4 & 3 & 0 & 0 & 1 \\ 1 & 4 & -1 & -4 & 3 & 0 & 0 & 1 \\ 1 & 3 & -1 & -3 & 2 & 0 & 1 & 0 \\ 0 & 2 & 0 & -2 & 1 & 0 & 1 & 0 \\ 0 & 1 & 0 & -1 & 0 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 0 & 0 & 0 & 0 & -2 & 2 \\ 2 & 0 & -1 & 1 & -1 & 0 & -2 & 2 \\ 3 & 0 & -1 & 0 & 0 & 0 & -3 & 3 \\ 5 & 0 & -2 & 1 & -1 & 0 & -4 & 4 \\ 4 & -1 & -1 & 1 & -1 & 0 & -3 & 3 \\ 3 & -1 & -1 & 1 & 0 & -1 & -2 & 2 \\ 2 & -1 & -1 & 1 & 0 & 0 & -2 & 1 \\ 1 & 0 & 0 & 0 & 0 & 0 & -1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 0 & 0 & 0 & 0 & 2 & -2 \\ -2 & 0 & 1 & -1 & 1 & 0 & 2 & -2 \\ -3 & 0 & 1 & 0 & 0 & 0 & 3 & -3 \\ -5 & 0 & 2 & -1 & 1 & 0 & 4 & -4 \\ -4 & 1 & 1 & -1 & 1 & 0 & 3 & -3 \\ -3 & 1 & 1 & -1 & 0 & 1 & 2 & -2 \\ -2 & 1 & 1 & -1 & 0 & 0 & 2 & -1 \\ -1 & 0 & 0 & 0 & 0 & 0 & 1 & 0 \end{pmatrix}, \\
\begin{pmatrix} 0 & -1 & 1 & 0 & 0 & 1 & -2 & 1 \\ 0 & -1 & 2 & 0 & -1 & 1 & -2 & 2 \\ 0 & -2 & 2 & 1 & -1 & 1 & -3 & 2 \\ -1 & -3 & 4 & 1 & -2 & 2 & -4 & 3 \\ -1 & -2 & 3 & 1 & -2 & 2 & -4 & 3 \\ 0 & -2 & 2 & 1 & -2 & 2 & -3 & 2 \\ 0 & -2 & 1 & 1 & -1 & 1 & -2 & 2 \\ 0 & -1 & 1 & 0 & 0 & 0 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 1 & -1 & 0 & 0 & -1 & 2 & -1 \\ 0 & 1 & -2 & 0 & 1 & -1 & 2 & -2 \\ 0 & 2 & -2 & -1 & 1 & -1 & 3 & -2 \\ 1 & 3 & -4 & -1 & 2 & -2 & 4 & -3 \\ 1 & 2 & -3 & -1 & 2 & -2 & 4 & -3 \\ 0 & 2 & -2 & -1 & 2 & -2 & 3 & -2 \\ 0 & 2 & -1 & -1 & 1 & -1 & 2 & -2 \\ 0 & 1 & -1 & 0 & 0 & 0 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & -1 & 0 & 0 & 0 & 1 & 1 \\ -1 & 1 & -1 & 0 & -1 & 1 & 1 & 1 \\ 0 & 1 & -2 & 0 & -1 & 1 & 1 & 2 \\ -1 & 2 & -2 & -1 & -1 & 2 & 1 & 3 \\ -1 & 1 & -2 & 0 & -1 & 2 & 0 & 3 \\ -1 & 1 & -1 & 0 & -1 & 1 & 0 & 3 \\ 0 & 1 & -1 & 0 & -1 & 1 & 0 & 2 \\ 0 & 0 & 0 & 0 & -1 & 1 & 0 & 1 \end{pmatrix}, \\
\begin{pmatrix} 0 & 0 & 1 & 0 & 0 & 0 & -1 & -1 \\ 1 & -1 & 1 & 0 & 1 & -1 & -1 & -1 \\ 0 & -1 & 2 & 0 & 1 & -1 & -1 & -2 \\ 1 & -2 & 2 & 1 & 1 & -2 & -1 & -3 \\ 1 & -1 & 2 & 0 & 1 & -2 & 0 & -3 \\ 1 & -1 & 1 & 0 & 1 & -1 & 0 & -3 \\ 0 & -1 & 1 & 0 & 1 & -1 & 0 & -2 \\ 0 & 0 & 0 & 0 & 1 & -1 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 0 & 0 & 1 & 0 & -1 & -1 \\ 0 & -1 & 0 & 0 & 2 & 0 & -2 & 0 \\ -1 & -1 & 1 & 0 & 2 & 0 & -2 & -1 \\ -1 & -2 & 0 & 1 & 3 & 0 & -3 & -1 \\ -1 & -1 & 0 & 0 & 3 & 0 & -2 & -1 \\ -1 & -1 & 0 & 0 & 2 & 1 & -2 & -1 \\ -1 & -1 & 0 & 0 & 2 & 0 & -1 & -1 \\ -1 & 0 & 0 & 0 & 1 & 0 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 0 & 0 & -1 & 0 & 1 & 1 \\ 0 & 1 & 0 & 0 & -2 & 0 & 2 & 0 \\ 1 & 1 & -1 & 0 & -2 & 0 & 2 & 1 \\ 1 & 2 & 0 & -1 & -3 & 0 & 3 & 1 \\ 1 & 1 & 0 & 0 & -3 & 0 & 2 & 1 \\ 1 & 1 & 0 & 0 & -2 & -1 & 2 & 1 \\ 1 & 1 & 0 & 0 & -2 & 0 & 1 & 1 \\ 1 & 0 & 0 & 0 & -1 & 0 & 1 & 0 \end{pmatrix}, \\
\begin{pmatrix} 0 & 1 & 0 & 0 & 0 & 0 & 0 & -1 \\ -1 & 1 & 0 & 0 & 1 & 0 & -1 & -1 \\ -1 & 1 & 0 & 1 & 0 & 0 & -1 & -1 \\ -2 & 1 & 0 & 1 & 1 & 0 & -1 & -2 \\ -1 & 1 & -1 & 1 & 1 & 0 & -1 & -1 \\ -1 & 1 & -1 & 1 & 0 & 1 & -1 & -1 \\ -1 & 1 & -1 & 1 & 0 & 0 & 0 & -1 \\ -1 & 1 & 0 & 0 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 0 & 0 & 0 & 0 & 0 & 1 \\ 1 & -1 & 0 & 0 & -1 & 0 & 1 & 1 \\ 1 & -1 & 0 & -1 & 0 & 0 & 1 & 1 \\ 2 & -1 & 0 & -1 & -1 & 0 & 1 & 2 \\ 1 & -1 & 1 & -1 & -1 & 0 & 1 & 1 \\ 1 & -1 & 1 & -1 & 0 & -1 & 1 & 1 \\ 1 & -1 & 1 & -1 & 0 & 0 & 0 & 1 \\ 1 & -1 & 0 & 0 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 1 & 1 & -1 & 1 & -1 & -1 & 1 \\ -1 & 1 & 0 & 0 & 1 & -1 & -2 & 1 \\ -1 & 1 & 1 & -1 & 2 & -2 & -2 & 1 \\ -1 & 2 & 1 & -1 & 2 & -2 & -4 & 2 \\ -1 & 1 & 1 & -1 & 2 & -1 & -4 & 2 \\ 0 & 1 & 0 & -1 & 2 & -1 & -3 & 2 \\ 0 & 1 & 0 & -1 & 2 & -1 & -2 & 1 \\ 0 & 1 & 0 & -1 & 1 & 0 & -1 & 0 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} 1 & -1 & -1 & 1 & -1 & 1 & 1 & -1 \\ 1 & -1 & 0 & 0 & -1 & 1 & 2 & -1 \\ 1 & -1 & -1 & 1 & -2 & 2 & 2 & -1 \\ 1 & -2 & -1 & 1 & -2 & 2 & 4 & -2 \\ 1 & -1 & -1 & 1 & -2 & 1 & 4 & -2 \\ 0 & -1 & 0 & 1 & -2 & 1 & 3 & -2 \\ 0 & -1 & 0 & 1 & -2 & 1 & 2 & -1 \\ 0 & -1 & 0 & 1 & -1 & 0 & 1 & 0 \end{pmatrix}, \begin{pmatrix} -2 & 1 & 1 & -1 & 0 & 1 & 0 & -1 \\ -3 & 0 & 2 & -1 & 0 & 2 & -1 & -1 \\ -4 & 1 & 2 & -1 & -1 & 3 & -1 & -1 \\ -6 & 1 & 4 & -2 & -1 & 4 & -2 & -1 \\ -5 & 1 & 3 & -1 & -1 & 3 & -2 & -1 \\ -4 & 1 & 3 & -1 & -1 & 2 & -1 & -1 \\ -3 & 1 & 2 & -1 & 0 & 1 & -1 & 0 \\ -2 & 0 & 1 & 0 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 2 & -1 & -1 & 1 & 0 & -1 & 0 & 1 \\ 3 & 0 & -2 & 1 & 0 & -2 & 1 & 1 \\ 4 & -1 & -2 & 1 & 1 & -3 & 1 & 1 \\ 6 & -1 & -4 & 2 & 1 & -4 & 2 & 1 \\ 5 & -1 & -3 & 1 & 1 & -3 & 2 & 1 \\ 4 & -1 & -3 & 1 & 1 & -2 & 1 & 1 \\ 3 & -1 & -2 & 1 & 0 & -1 & 1 & 0 \\ 2 & 0 & -1 & 0 & 0 & 0 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} -1 & -1 & 0 & 1 & -1 & 1 & 1 & -2 \\ -1 & -2 & 1 & 1 & -2 & 2 & 1 & -2 \\ -2 & -2 & 1 & 2 & -3 & 2 & 2 & -3 \\ -3 & -3 & 2 & 2 & -4 & 3 & 3 & -4 \\ -2 & -2 & 1 & 2 & -4 & 3 & 2 & -3 \\ -2 & -1 & 1 & 1 & -3 & 3 & 1 & -2 \\ -2 & -1 & 1 & 1 & -2 & 2 & 0 & -1 \\ -1 & -1 & 0 & 1 & -1 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 1 & 0 & -1 & 1 & -1 & -1 & 2 \\ 1 & 2 & -1 & -1 & 2 & -2 & -1 & 2 \\ 2 & 2 & -1 & -2 & 3 & -2 & -2 & 3 \\ 3 & 3 & -2 & -2 & 4 & -3 & -3 & 4 \\ 2 & 2 & -1 & -2 & 4 & -3 & -2 & 3 \\ 2 & 1 & -1 & -1 & 3 & -3 & -1 & 2 \\ 2 & 1 & -1 & -1 & 2 & -2 & 0 & 1 \\ 1 & 1 & 0 & -1 & 1 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -2 & 1 & 1 & -1 & 0 & 0 & 1 & 0 \\ -3 & 1 & 2 & -2 & 1 & 0 & 1 & 0 \\ -4 & 1 & 3 & -2 & 0 & 0 & 2 & 0 \\ -6 & 2 & 5 & -4 & 1 & 0 & 2 & 0 \\ -4 & 2 & 4 & -4 & 1 & 0 & 2 & 0 \\ -3 & 2 & 3 & -3 & 0 & 1 & 1 & 0 \\ -2 & 2 & 2 & -2 & 0 & 0 & 1 & 0 \\ -1 & 1 & 1 & -1 & 0 & 0 & 1 & -1 \end{pmatrix}, \\
\begin{pmatrix} -1 & 0 & 1 & 0 & -1 & 2 & -2 & 0 \\ -1 & 0 & 1 & 1 & -2 & 2 & -3 & 1 \\ -2 & 1 & 2 & 0 & -2 & 3 & -4 & 1 \\ -2 & 1 & 3 & 0 & -3 & 4 & -6 & 2 \\ -2 & 1 & 3 & 0 & -3 & 3 & -4 & 1 \\ -1 & 1 & 2 & 0 & -2 & 2 & -3 & 0 \\ 0 & 1 & 1 & 0 & -2 & 2 & -2 & 0 \\ 0 & 0 & 1 & 0 & -1 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & -1 & 0 & 1 & -2 & 2 & 0 \\ 1 & 0 & -1 & -1 & 2 & -2 & 3 & -1 \\ 2 & -1 & -2 & 0 & 2 & -3 & 4 & -1 \\ 2 & -1 & -3 & 0 & 3 & -4 & 6 & -2 \\ 2 & -1 & -3 & 0 & 3 & -3 & 4 & -1 \\ 1 & -1 & -2 & 0 & 2 & -2 & 3 & 0 \\ 0 & -1 & -1 & 0 & 2 & -2 & 2 & 0 \\ 0 & 0 & -1 & 0 & 1 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} -2 & 0 & 2 & 0 & -1 & 0 & 1 & -1 \\ -2 & 0 & 3 & 0 & -2 & 1 & 0 & -1 \\ -3 & 0 & 4 & 0 & -2 & 0 & 1 & -1 \\ -4 & 0 & 6 & 0 & -3 & 0 & 1 & -2 \\ -3 & 0 & 5 & 0 & -3 & 0 & 1 & -1 \\ -2 & 1 & 4 & -1 & -2 & 0 & 1 & -1 \\ -1 & 0 & 3 & -1 & -1 & 0 & 1 & -1 \\ -1 & 0 & 2 & -1 & 0 & 0 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} -1 & 0 & 0 & 2 & -2 & 0 & 0 & 0 \\ -2 & 0 & 1 & 2 & -2 & 0 & -1 & 0 \\ -2 & 0 & 1 & 3 & -3 & 0 & -1 & 0 \\ -3 & 0 & 2 & 4 & -4 & -1 & -1 & 0 \\ -2 & 0 & 2 & 3 & -4 & 0 & -1 & 0 \\ -1 & 1 & 1 & 2 & -3 & 0 & -1 & 0 \\ -1 & 1 & 1 & 1 & -2 & 0 & 0 & -1 \\ -1 & 1 & 1 & 0 & -1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 2 & 0 & 0 & -1 & 0 & 0 & 0 & 1 \\ 3 & 0 & 0 & -1 & 0 & -1 & 1 & 0 \\ 4 & 0 & 0 & -1 & -1 & 0 & 0 & 1 \\ 6 & 0 & -1 & -1 & -1 & -1 & 1 & 1 \\ 5 & 0 & -1 & -1 & -1 & 0 & 1 & 0 \\ 4 & 0 & -1 & -1 & 0 & 0 & 0 & 0 \\ 3 & -1 & -1 & 0 & 0 & 0 & 0 & 0 \\ 1 & -1 & 0 & 0 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 1 & -1 & 1 & 1 & -1 & 1 \\ -1 & -1 & 1 & -1 & 1 & 1 & -1 & 2 \\ -2 & -1 & 2 & -2 & 2 & 1 & -2 & 3 \\ -3 & -2 & 2 & -2 & 3 & 1 & -2 & 4 \\ -2 & -1 & 1 & -2 & 3 & 1 & -2 & 3 \\ -2 & 0 & 1 & -2 & 2 & 1 & -1 & 2 \\ -1 & 0 & 0 & -1 & 1 & 1 & -1 & 2 \\ -1 & 0 & 0 & 0 & 0 & 1 & -1 & 1 \end{pmatrix}, \\
\begin{pmatrix} 1 & 1 & -1 & 1 & -1 & -1 & 1 & -1 \\ 1 & 1 & -1 & 1 & -1 & -1 & 1 & -2 \\ 2 & 1 & -2 & 2 & -2 & -1 & 2 & -3 \\ 3 & 2 & -2 & 2 & -3 & -1 & 2 & -4 \\ 2 & 1 & -1 & 2 & -3 & -1 & 2 & -3 \\ 2 & 0 & -1 & 2 & -2 & -1 & 1 & -2 \\ 1 & 0 & 0 & 1 & -1 & -1 & 1 & -2 \\ 1 & 0 & 0 & 0 & 0 & -1 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 1 & -1 & 1 & -1 & 1 & -2 & 1 \\ -1 & 2 & 0 & 1 & -2 & 1 & -2 & 1 \\ -1 & 2 & -1 & 2 & -3 & 2 & -3 & 2 \\ -2 & 4 & -1 & 2 & -4 & 3 & -4 & 2 \\ -2 & 3 & -1 & 2 & -3 & 2 & -3 & 2 \\ -1 & 3 & -1 & 1 & -2 & 1 & -2 & 2 \\ 0 & 2 & -1 & 1 & -2 & 1 & -1 & 1 \\ 0 & 1 & -1 & 1 & -1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -1 & -1 & 1 & 0 & -1 & 2 & -1 \\ 0 & 0 & -2 & 1 & 0 & -1 & 2 & -1 \\ 0 & -1 & -2 & 1 & 0 & -1 & 3 & -1 \\ 0 & -1 & -3 & 1 & 1 & -2 & 4 & -2 \\ 0 & 0 & -2 & 0 & 1 & -2 & 4 & -2 \\ 0 & 0 & -1 & 0 & 0 & -1 & 3 & -2 \\ 0 & 0 & -1 & 0 & 0 & 0 & 2 & -2 \\ -1 & 0 & 0 & 0 & 0 & 0 & 1 & -1 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} 0 & -2 & 1 & 0 & 1 & -1 & 1 & -1 \\ 1 & -3 & 0 & 1 & 1 & -2 & 2 & -1 \\ 1 & -4 & 0 & 1 & 2 & -2 & 2 & -2 \\ 2 & -6 & 0 & 2 & 2 & -3 & 3 & -3 \\ 1 & -5 & 0 & 2 & 1 & -2 & 3 & -3 \\ 1 & -4 & 0 & 2 & 0 & -1 & 2 & -2 \\ 0 & -3 & 0 & 2 & 0 & -1 & 1 & -1 \\ 0 & -2 & 0 & 1 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -2 & 1 & 0 & 0 & 0 & 0 & 1 \\ 0 & -3 & 1 & 0 & 0 & 1 & 0 & 1 \\ 0 & -4 & 2 & 0 & 0 & 0 & 1 & 1 \\ 0 & -5 & 3 & -1 & 0 & 1 & 1 & 2 \\ 0 & -4 & 2 & 0 & -1 & 1 & 1 & 2 \\ -1 & -3 & 2 & 0 & -1 & 1 & 1 & 1 \\ -1 & -2 & 1 & 0 & 0 & 0 & 1 & 1 \\ -1 & -1 & 1 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 1 & 1 & -1 & 0 & 0 & -1 & 2 & -2 \\ 2 & 2 & -2 & -1 & 1 & -1 & 2 & -2 \\ 2 & 3 & -2 & -1 & 1 & -2 & 3 & -3 \\ 4 & 4 & -3 & -2 & 2 & -3 & 4 & -4 \\ 3 & 3 & -2 & -2 & 2 & -3 & 4 & -3 \\ 2 & 2 & -1 & -2 & 2 & -2 & 3 & -3 \\ 1 & 2 & 0 & -2 & 1 & -1 & 2 & -2 \\ 1 & 1 & 0 & -1 & 0 & 0 & 1 & -1 \end{pmatrix}, \\
\begin{pmatrix} 0 & 2 & 0 & 0 & -1 & -1 & 1 & 0 \\ 1 & 3 & 0 & -1 & -1 & -1 & 2 & -1 \\ 1 & 4 & 0 & -1 & -1 & -2 & 2 & 0 \\ 2 & 6 & 0 & -2 & -1 & -3 & 3 & -1 \\ 1 & 5 & 0 & -2 & 0 & -3 & 3 & -1 \\ 0 & 4 & 1 & -2 & 0 & -2 & 2 & -1 \\ 0 & 3 & 1 & -2 & 0 & -1 & 1 & 0 \\ 0 & 1 & 1 & -1 & 0 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 1 & 1 & -1 & 0 & 0 & 1 & -2 \\ -1 & 1 & 1 & -1 & -1 & 1 & 1 & -2 \\ -1 & 2 & 1 & -2 & 0 & 0 & 2 & -3 \\ -2 & 3 & 2 & -3 & -1 & 1 & 3 & -4 \\ -1 & 3 & 2 & -3 & -1 & 1 & 2 & -3 \\ -1 & 2 & 2 & -2 & -1 & 0 & 2 & -2 \\ -1 & 2 & 1 & -1 & -1 & 0 & 1 & -1 \\ 0 & 1 & 0 & 0 & -1 & 0 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 1 & -1 & -1 & 1 & 0 & 0 & -1 & 2 \\ 1 & -1 & -1 & 1 & 1 & -1 & -1 & 2 \\ 1 & -2 & -1 & 2 & 0 & 0 & -2 & 3 \\ 2 & -3 & -2 & 3 & 1 & -1 & -3 & 4 \\ 1 & -3 & -2 & 3 & 1 & -1 & -2 & 3 \\ 1 & -2 & -2 & 2 & 1 & 0 & -2 & 2 \\ 1 & -2 & -1 & 1 & 1 & 0 & -1 & 1 \\ 0 & -1 & 0 & 0 & 1 & 0 & -1 & 1 \end{pmatrix}, \\
\begin{pmatrix} -2 & 1 & 1 & 0 & 0 & -1 & 0 & 0 \\ -3 & 1 & 1 & 0 & 1 & -1 & -1 & 0 \\ -4 & 1 & 2 & 0 & 1 & -2 & -1 & 1 \\ -6 & 1 & 3 & 0 & 2 & -3 & -1 & 0 \\ -5 & 1 & 2 & 0 & 2 & -3 & 0 & 0 \\ -4 & 1 & 2 & -1 & 2 & -2 & 0 & 0 \\ -2 & 1 & 1 & -1 & 2 & -2 & 0 & 0 \\ -1 & 1 & 1 & -1 & 1 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 2 & -1 & -1 & 0 & 0 & 1 & 0 & 0 \\ 3 & -1 & -1 & 0 & -1 & 1 & 1 & 0 \\ 4 & -1 & -2 & 0 & -1 & 2 & 1 & -1 \\ 6 & -1 & -3 & 0 & -2 & 3 & 1 & 0 \\ 5 & -1 & -2 & 0 & -2 & 3 & 0 & 0 \\ 4 & -1 & -2 & 1 & -2 & 2 & 0 & 0 \\ 2 & -1 & -1 & 1 & -2 & 2 & 0 & 0 \\ 1 & -1 & -1 & 1 & -1 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 0 & 0 & 1 & -2 & 1 & 1 \\ -1 & 0 & 0 & 0 & 2 & -3 & 0 & 2 \\ -2 & 0 & 0 & 0 & 2 & -3 & 0 & 3 \\ -3 & -1 & 0 & 1 & 3 & -5 & 0 & 4 \\ -2 & -1 & 0 & 1 & 2 & -4 & 0 & 4 \\ -1 & -1 & -1 & 1 & 2 & -3 & 0 & 3 \\ 0 & -1 & -1 & 1 & 1 & -2 & 0 & 2 \\ 0 & -1 & 0 & 0 & 1 & -1 & 0 & 1 \end{pmatrix}, \\
\begin{pmatrix} 1 & -1 & 1 & 0 & -1 & 1 & -1 & 0 \\ 0 & -1 & 3 & -1 & -1 & 1 & -1 & 0 \\ 1 & -2 & 3 & -1 & -1 & 2 & -2 & 0 \\ 0 & -3 & 5 & -1 & -2 & 3 & -3 & 0 \\ 0 & -3 & 4 & -1 & -1 & 2 & -2 & 0 \\ 0 & -3 & 3 & 0 & -1 & 1 & -1 & 0 \\ 0 & -2 & 2 & 0 & -1 & 1 & 0 & -1 \\ 0 & -1 & 1 & 0 & -1 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 1 & -1 & 0 & 1 & -1 & 1 & 0 \\ 0 & 1 & -3 & 1 & 1 & -1 & 1 & 0 \\ -1 & 2 & -3 & 1 & 1 & -2 & 2 & 0 \\ 0 & 3 & -5 & 1 & 2 & -3 & 3 & 0 \\ 0 & 3 & -4 & 1 & 1 & -2 & 2 & 0 \\ 0 & 3 & -3 & 0 & 1 & -1 & 1 & 0 \\ 0 & 2 & -2 & 0 & 1 & -1 & 0 & 1 \\ 0 & 1 & -1 & 0 & 1 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 0 & 0 & -1 & 1 & 0 & -2 \\ 0 & 1 & 0 & 0 & -2 & 2 & 1 & -3 \\ 0 & 1 & 0 & 1 & -3 & 2 & 1 & -4 \\ 0 & 2 & 0 & 1 & -5 & 4 & 1 & -5 \\ 0 & 1 & 0 & 1 & -4 & 4 & 0 & -4 \\ 1 & 1 & -1 & 1 & -3 & 3 & 0 & -3 \\ 1 & 0 & -1 & 1 & -2 & 2 & 0 & -2 \\ 1 & 0 & 0 & 0 & -1 & 1 & 0 & -1 \end{pmatrix}, \\
\begin{pmatrix} -2 & 0 & 2 & 0 & -1 & 0 & 0 & 0 \\ -3 & 0 & 3 & -1 & 0 & 0 & -1 & 1 \\ -4 & 0 & 3 & 0 & -1 & 0 & -1 & 1 \\ -6 & 0 & 5 & -1 & 0 & -1 & -1 & 1 \\ -5 & 1 & 4 & -1 & 0 & -1 & -1 & 1 \\ -4 & 0 & 3 & 0 & 0 & -1 & -1 & 1 \\ -3 & 0 & 2 & 0 & 0 & -1 & 0 & 1 \\ -1 & 0 & 1 & 0 & 0 & -1 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 0 & 0 & -1 & 0 & 0 & 2 \\ 1 & -1 & 1 & 0 & -1 & 0 & -1 & 3 \\ 2 & -1 & 0 & 0 & -1 & 0 & -1 & 4 \\ 3 & -1 & 1 & -1 & -1 & 0 & -2 & 6 \\ 3 & -1 & 0 & 0 & -1 & 0 & -2 & 5 \\ 2 & 0 & 0 & 0 & -1 & 0 & -2 & 4 \\ 2 & 0 & 0 & 0 & -1 & 0 & -1 & 2 \\ 1 & 0 & 0 & 0 & 0 & -1 & 0 & 1 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 0 & 0 & 1 & 0 & 0 & -2 \\ -1 & 1 & -1 & 0 & 1 & 0 & 1 & -3 \\ -2 & 1 & 0 & 0 & 1 & 0 & 1 & -4 \\ -3 & 1 & -1 & 1 & 1 & 0 & 2 & -6 \\ -3 & 1 & 0 & 0 & 1 & 0 & 2 & -5 \\ -2 & 0 & 0 & 0 & 1 & 0 & 2 & -4 \\ -2 & 0 & 0 & 0 & 1 & 0 & 1 & -2 \\ -1 & 0 & 0 & 0 & 0 & 1 & 0 & -1 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} 2 & 0 & -1 & 0 & 0 & -1 & 2 & -1 \\ 3 & 0 & -2 & 0 & 1 & -2 & 2 & -1 \\ 4 & 0 & -2 & 0 & 0 & -2 & 3 & -1 \\ 6 & 0 & -3 & 0 & 1 & -4 & 4 & -1 \\ 4 & 0 & -2 & 0 & 1 & -4 & 4 & -1 \\ 3 & 0 & -2 & 0 & 1 & -3 & 3 & 0 \\ 2 & 1 & -1 & -1 & 1 & -2 & 2 & 0 \\ 1 & 0 & 0 & -1 & 1 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 2 & 0 & -1 & 0 & 0 & 1 & -1 \\ -1 & 2 & 1 & -1 & 0 & 0 & 1 & -2 \\ -1 & 3 & 1 & -2 & 0 & 1 & 1 & -2 \\ -1 & 4 & 2 & -3 & 0 & 1 & 2 & -4 \\ -1 & 4 & 2 & -3 & 0 & 1 & 1 & -3 \\ -1 & 3 & 2 & -3 & 1 & 0 & 1 & -2 \\ -1 & 2 & 1 & -2 & 1 & 0 & 1 & -2 \\ -1 & 1 & 1 & -1 & 0 & 0 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 2 & 1 & -1 & -1 & 0 & 1 & 0 & -1 \\ 3 & 1 & -1 & -1 & 0 & 1 & -1 & -1 \\ 3 & 2 & -1 & -2 & 0 & 2 & -1 & -2 \\ 5 & 3 & -1 & -3 & 0 & 2 & -1 & -3 \\ 4 & 3 & -1 & -2 & -1 & 2 & -1 & -2 \\ 3 & 2 & 0 & -2 & -1 & 2 & -1 & -1 \\ 2 & 1 & 0 & -1 & -1 & 1 & 0 & -1 \\ 1 & 1 & 0 & -1 & 0 & 0 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} -1 & 0 & 1 & -1 & 1 & 0 & -1 & 0 \\ 0 & -1 & 1 & -1 & 1 & 0 & -1 & 0 \\ -1 & 0 & 2 & -2 & 1 & 0 & -1 & 0 \\ -1 & -1 & 2 & -2 & 2 & -1 & -1 & 0 \\ -1 & -1 & 2 & -1 & 1 & -1 & -1 & 0 \\ -1 & -1 & 1 & 0 & 0 & 0 & -1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & -1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & -1 & 1 & -1 & 0 & 1 & 0 \\ 0 & 1 & -1 & 1 & -1 & 0 & 1 & 0 \\ 1 & 0 & -2 & 2 & -1 & 0 & 1 & 0 \\ 1 & 1 & -2 & 2 & -2 & 1 & 1 & 0 \\ 1 & 1 & -2 & 1 & -1 & 1 & 1 & 0 \\ 1 & 1 & -1 & 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 0 & -1 & 2 & -1 & 0 & 1 \\ -1 & 0 & 0 & -2 & 3 & -1 & 1 & 0 \\ -1 & 1 & 0 & -3 & 4 & -2 & 1 & 1 \\ -2 & 1 & 0 & -4 & 5 & -2 & 2 & 1 \\ -1 & 0 & 0 & -3 & 4 & -2 & 2 & 1 \\ -1 & 0 & 1 & -3 & 3 & -1 & 1 & 1 \\ 0 & 0 & 0 & -2 & 2 & 0 & 0 & 1 \\ 0 & 0 & 0 & -1 & 1 & 0 & 0 & 1 \end{pmatrix}, \\
\begin{pmatrix} 1 & 0 & 0 & 1 & -2 & 1 & 0 & -1 \\ 1 & 0 & 0 & 2 & -3 & 1 & -1 & 0 \\ 1 & -1 & 0 & 3 & -4 & 2 & -1 & -1 \\ 2 & -1 & 0 & 4 & -5 & 2 & -2 & -1 \\ 1 & 0 & 0 & 3 & -4 & 2 & -2 & -1 \\ 1 & 0 & -1 & 3 & -3 & 1 & -1 & -1 \\ 0 & 0 & 0 & 2 & -2 & 0 & 0 & -1 \\ 0 & 0 & 0 & 1 & -1 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} -2 & 1 & 1 & -1 & 1 & 0 & -1 & 0 \\ -3 & 2 & 1 & -1 & 1 & 0 & -1 & 0 \\ -4 & 3 & 2 & -2 & 1 & 0 & -1 & 0 \\ -6 & 4 & 2 & -2 & 2 & -1 & -1 & 0 \\ -5 & 3 & 2 & -2 & 2 & -1 & 0 & -1 \\ -4 & 2 & 1 & -1 & 1 & 0 & 0 & -1 \\ -2 & 2 & 0 & -1 & 1 & 0 & 0 & -1 \\ -1 & 1 & 0 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 2 & -1 & -1 & 1 & -1 & 0 & 1 & 0 \\ 3 & -2 & -1 & 1 & -1 & 0 & 1 & 0 \\ 4 & -3 & -2 & 2 & -1 & 0 & 1 & 0 \\ 6 & -4 & -2 & 2 & -2 & 1 & 1 & 0 \\ 5 & -3 & -2 & 2 & -2 & 1 & 0 & 1 \\ 4 & -2 & -1 & 1 & -1 & 0 & 0 & 1 \\ 2 & -2 & 0 & 1 & -1 & 0 & 0 & 1 \\ 1 & -1 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \\
\begin{pmatrix} -1 & 0 & 0 & 1 & 0 & -1 & 0 & 1 \\ -1 & 0 & 0 & 1 & 0 & -1 & 1 & 0 \\ -1 & 1 & 0 & 1 & 0 & -2 & 1 & 1 \\ -2 & 1 & 0 & 2 & -1 & -2 & 2 & 1 \\ -1 & 0 & 0 & 2 & -1 & -2 & 2 & 1 \\ -1 & 0 & 1 & 1 & -1 & -1 & 1 & 1 \\ 0 & 0 & 0 & 1 & -1 & 0 & 0 & 1 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 0 & -1 & 0 & 1 & 0 & -1 \\ 1 & 0 & 0 & -1 & 0 & 1 & -1 & 0 \\ 1 & -1 & 0 & -1 & 0 & 2 & -1 & -1 \\ 2 & -1 & 0 & -2 & 1 & 2 & -2 & -1 \\ 1 & 0 & 0 & -2 & 1 & 2 & -2 & -1 \\ 1 & 0 & -1 & -1 & 1 & 1 & -1 & -1 \\ 0 & 0 & 0 & -1 & 1 & 0 & 0 & -1 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 1 & 0 & -1 & 2 & 0 & -1 \\ -1 & -2 & 1 & 1 & -2 & 3 & -1 & -1 \\ -1 & -2 & 1 & 1 & -3 & 4 & 0 & -2 \\ -2 & -3 & 2 & 1 & -4 & 6 & -1 & -2 \\ -2 & -2 & 2 & 1 & -4 & 5 & -1 & -1 \\ -1 & -1 & 2 & 0 & -3 & 4 & -1 & -1 \\ 0 & -1 & 1 & 0 & -2 & 3 & -1 & 0 \\ 0 & -1 & 1 & 0 & -1 & 1 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 1 & 1 & -1 & 0 & 1 & -2 & 0 & 1 \\ 1 & 2 & -1 & -1 & 2 & -3 & 1 & 1 \\ 1 & 2 & -1 & -1 & 3 & -4 & 0 & 2 \\ 2 & 3 & -2 & -1 & 4 & -6 & 1 & 2 \\ 2 & 2 & -2 & -1 & 4 & -5 & 1 & 1 \\ 1 & 1 & -2 & 0 & 3 & -4 & 1 & 1 \\ 0 & 1 & -1 & 0 & 2 & -3 & 1 & 0 \\ 0 & 1 & -1 & 0 & 1 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & -1 & -1 & 1 & 0 & 1 & -2 & 0 \\ 2 & -1 & -2 & 1 & 0 & 2 & -2 & -1 \\ 2 & -1 & -3 & 2 & 0 & 2 & -3 & -1 \\ 3 & -2 & -4 & 3 & -1 & 4 & -4 & -2 \\ 2 & -2 & -3 & 2 & 0 & 3 & -3 & -2 \\ 2 & -1 & -2 & 1 & 0 & 2 & -2 & -2 \\ 2 & -1 & -2 & 1 & 0 & 1 & -1 & -1 \\ 1 & -1 & -1 & 1 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & -2 & 1 & 0 & 0 & 0 & 0 & 1 \\ 1 & -3 & 0 & 1 & -1 & 1 & 0 & 1 \\ 0 & -4 & 1 & 1 & -1 & 1 & 0 & 2 \\ 0 & -6 & 1 & 2 & -2 & 2 & 0 & 2 \\ 0 & -5 & 1 & 2 & -2 & 2 & -1 & 2 \\ 0 & -3 & 1 & 1 & -2 & 2 & -1 & 2 \\ 0 & -2 & 1 & 0 & -1 & 2 & -1 & 1 \\ 0 & -1 & 0 & 0 & 0 & 1 & -1 & 1 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} 0 & -2 & -1 & 2 & -1 & 1 & 0 & -1 \\ 1 & -3 & -2 & 2 & 0 & 1 & 0 & -1 \\ 1 & -4 & -2 & 3 & -1 & 1 & 1 & -2 \\ 2 & -6 & -3 & 4 & -1 & 2 & 0 & -2 \\ 2 & -5 & -3 & 4 & -1 & 1 & 0 & -1 \\ 2 & -4 & -2 & 3 & -1 & 1 & 0 & -1 \\ 1 & -3 & -1 & 2 & 0 & 0 & 0 & -1 \\ 1 & -1 & -1 & 1 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 2 & 1 & -2 & 1 & -1 & 0 & 1 \\ -1 & 3 & 2 & -2 & 0 & -1 & 0 & 1 \\ -1 & 4 & 2 & -3 & 1 & -1 & -1 & 2 \\ -2 & 6 & 3 & -4 & 1 & -2 & 0 & 2 \\ -2 & 5 & 3 & -4 & 1 & -1 & 0 & 1 \\ -2 & 4 & 2 & -3 & 1 & -1 & 0 & 1 \\ -1 & 3 & 1 & -2 & 0 & 0 & 0 & 1 \\ -1 & 1 & 1 & -1 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} -1 & -2 & 0 & 2 & -1 & 1 & -1 & 0 \\ -1 & -3 & 0 & 2 & 0 & 1 & -2 & 1 \\ -2 & -4 & 1 & 3 & -1 & 1 & -2 & 1 \\ -2 & -6 & 1 & 4 & -1 & 2 & -4 & 2 \\ -1 & -5 & 0 & 4 & -1 & 1 & -3 & 2 \\ 0 & -4 & 0 & 3 & -1 & 1 & -2 & 1 \\ 0 & -3 & 0 & 2 & 0 & 0 & -1 & 0 \\ 0 & -1 & 0 & 1 & 0 & 0 & -1 & 0 \end{pmatrix}, \\
\begin{pmatrix} 1 & 2 & 0 & -2 & 1 & -1 & 1 & 0 \\ 1 & 3 & 0 & -2 & 0 & -1 & 2 & -1 \\ 2 & 4 & -1 & -3 & 1 & -1 & 2 & -1 \\ 2 & 6 & -1 & -4 & 1 & -2 & 4 & -2 \\ 1 & 5 & 0 & -4 & 1 & -1 & 3 & -2 \\ 0 & 4 & 0 & -3 & 1 & -1 & 2 & -1 \\ 0 & 3 & 0 & -2 & 0 & 0 & 1 & 0 \\ 0 & 1 & 0 & -1 & 0 & 0 & 1 & 0 \end{pmatrix}, \begin{pmatrix} -2 & 1 & 1 & -1 & 0 & 0 & 1 & 0 \\ -2 & 2 & 1 & -1 & -1 & 0 & 2 & 0 \\ -3 & 2 & 2 & -2 & -1 & 1 & 2 & 0 \\ -4 & 4 & 3 & -3 & -2 & 1 & 3 & 0 \\ -3 & 3 & 3 & -3 & -1 & 0 & 3 & 0 \\ -2 & 3 & 2 & -3 & 0 & 0 & 2 & 0 \\ -1 & 2 & 1 & -2 & 0 & 0 & 1 & 1 \\ 0 & 1 & 0 & -1 & 0 & 0 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 2 & -1 & -1 & 1 & 0 & 0 & -1 & 0 \\ 2 & -2 & -1 & 1 & 1 & 0 & -2 & 0 \\ 3 & -2 & -2 & 2 & 1 & -1 & -2 & 0 \\ 4 & -4 & -3 & 3 & 2 & -1 & -3 & 0 \\ 3 & -3 & -3 & 3 & 1 & 0 & -3 & 0 \\ 2 & -3 & -2 & 3 & 0 & 0 & -2 & 0 \\ 1 & -2 & -1 & 2 & 0 & 0 & -1 & -1 \\ 0 & -1 & 0 & 1 & 0 & 0 & -1 & 0 \end{pmatrix}, \\
\begin{pmatrix} -1 & 0 & 0 & 0 & 1 & -1 & 1 & -2 \\ -1 & 0 & 0 & 1 & 0 & -1 & 1 & -3 \\ -1 & 1 & 0 & 0 & 1 & -2 & 2 & -4 \\ -2 & 1 & 0 & 1 & 0 & -2 & 3 & -6 \\ -2 & 1 & 0 & 1 & 0 & -2 & 2 & -4 \\ -2 & 1 & 1 & 0 & 0 & -1 & 1 & -3 \\ -1 & 1 & 0 & 0 & 0 & 0 & 0 & -2 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 0 & 0 & -1 & 1 & -1 & 2 \\ 1 & 0 & 0 & -1 & 0 & 1 & -1 & 3 \\ 1 & -1 & 0 & 0 & -1 & 2 & -2 & 4 \\ 2 & -1 & 0 & -1 & 0 & 2 & -3 & 6 \\ 2 & -1 & 0 & -1 & 0 & 2 & -2 & 4 \\ 2 & -1 & -1 & 0 & 0 & 1 & -1 & 3 \\ 1 & -1 & 0 & 0 & 0 & 0 & 0 & 2 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 1 & 0 & 0 & 1 & -2 & 1 \\ 0 & -1 & 1 & 0 & 0 & 1 & -2 & 2 \\ -1 & -2 & 2 & 0 & 0 & 2 & -3 & 2 \\ -1 & -3 & 2 & 1 & 0 & 2 & -4 & 3 \\ -1 & -2 & 2 & 0 & 1 & 1 & -3 & 2 \\ -1 & -2 & 2 & 0 & 1 & 0 & -2 & 2 \\ 0 & -2 & 1 & 0 & 1 & 0 & -1 & 1 \\ 0 & -1 & 0 & 0 & 1 & 0 & -1 & 1 \end{pmatrix}, \\
\begin{pmatrix} 0 & 1 & -1 & 0 & 0 & -1 & 2 & -1 \\ 0 & 1 & -1 & 0 & 0 & -1 & 2 & -2 \\ 1 & 2 & -2 & 0 & 0 & -2 & 3 & -2 \\ 1 & 3 & -2 & -1 & 0 & -2 & 4 & -3 \\ 1 & 2 & -2 & 0 & -1 & -1 & 3 & -2 \\ 1 & 2 & -2 & 0 & -1 & 0 & 2 & -2 \\ 0 & 2 & -1 & 0 & -1 & 0 & 1 & -1 \\ 0 & 1 & 0 & 0 & -1 & 0 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 1 & -1 & -1 & 0 & 0 & 2 & -1 & 0 \\ 2 & -1 & -2 & 0 & 1 & 2 & -2 & 0 \\ 2 & -1 & -2 & 0 & 0 & 4 & -3 & 0 \\ 4 & -2 & -4 & 1 & 0 & 5 & -4 & 0 \\ 4 & -1 & -3 & 0 & 0 & 4 & -3 & 0 \\ 3 & -1 & -2 & 0 & 0 & 3 & -3 & 1 \\ 2 & -1 & -1 & 0 & 0 & 2 & -2 & 0 \\ 1 & 0 & -1 & 0 & 0 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 1 & 1 & 0 & 0 & -2 & 1 & 0 \\ -2 & 1 & 2 & 0 & -1 & -2 & 2 & 0 \\ -2 & 1 & 2 & 0 & 0 & -4 & 3 & 0 \\ -4 & 2 & 4 & -1 & 0 & -5 & 4 & 0 \\ -4 & 1 & 3 & 0 & 0 & -4 & 3 & 0 \\ -3 & 1 & 2 & 0 & 0 & -3 & 3 & -1 \\ -2 & 1 & 1 & 0 & 0 & -2 & 2 & 0 \\ -1 & 0 & 1 & 0 & 0 & -1 & 1 & 0 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix}
1 & 0 & 0 & 0 & -1 & 0 & 2 & -2 \\
2 & 0 & -1 & 0 & -1 & 0 & 3 & -2 \\
2 & 0 & -1 & 0 & -1 & 0 & 4 & -4 \\
3 & -1 & -2 & 1 & -2 & 0 & 6 & -5 \\
2 & -1 & -1 & 0 & -1 & 0 & 5 & -4 \\
1 & -1 & 0 & 0 & -1 & 0 & 4 & -3 \\
0 & 0 & 0 & 0 & -1 & 0 & 3 & -2 \\
0 & 0 & 0 & 0 & -1 & 1 & 1 & -1
\end{pmatrix},
\begin{pmatrix}
-1 & 0 & 0 & 0 & 1 & 0 & -2 & 2 \\
-2 & 0 & 1 & 0 & 1 & 0 & -3 & 2 \\
-2 & 0 & 1 & 0 & 1 & 0 & -4 & 4 \\
-3 & 1 & 2 & -1 & 2 & 0 & -6 & 5 \\
-2 & 1 & 1 & 0 & 1 & 0 & -5 & 4 \\
-1 & 1 & 0 & 0 & 1 & 0 & -4 & 3 \\
0 & 0 & 0 & 0 & 1 & 0 & -3 & 2 \\
0 & 0 & 0 & 0 & 1 & -1 & -1 & 1
\end{pmatrix},
\begin{pmatrix}
0 & -1 & -1 & 1 & 1 & -1 & 0 & 1 \\
-1 & -1 & -2 & 2 & 1 & -1 & 0 & 1 \\
-1 & -2 & -2 & 2 & 2 & -1 & -1 & 2 \\
-2 & -2 & -3 & 3 & 3 & -2 & -1 & 2 \\
-2 & -2 & -2 & 2 & 3 & -2 & 0 & 1 \\
-2 & -2 & -1 & 2 & 2 & -2 & 0 & 1 \\
-1 & -1 & -1 & 1 & 2 & -2 & 0 & 1 \\
0 & -1 & -1 & 1 & 1 & -1 & 0 & 0
\end{pmatrix},$$

$$\begin{pmatrix}
0 & 1 & 1 & -1 & -1 & 1 & 0 & -1 \\
1 & 1 & 2 & -2 & -1 & 1 & 0 & -1 \\
1 & 2 & 2 & -2 & -2 & 1 & 1 & -2 \\
2 & 2 & 3 & -3 & -3 & 2 & 1 & -2 \\
2 & 2 & 2 & -2 & -3 & 2 & 0 & -1 \\
2 & 2 & 1 & -2 & -2 & 2 & 0 & -1 \\
1 & 1 & 1 & -1 & -2 & 2 & 0 & -1 \\
0 & 1 & 1 & -1 & -1 & 1 & 0 & 0
\end{pmatrix}.$$

The character table of G^{s_7} :

	10										20									
$\chi_7^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_7^{(2)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	1	1	1
$\chi_7^{(3)}$	8	-8	.	-2	2	.	-1	1	-4	4	.	4	-4	.	-2	2	1	-1	1	-3
$\chi_7^{(4)}$	8	-8	.	-2	2	.	-1	1	-4	4	.	4	-4	.	2	-2	-1	1	1	-3
$\chi_7^{(5)}$	28	28	-1	3	3	4	.	.	10	10	-2	8	8	-4	.	.	.	2	2	2
$\chi_7^{(6)}$	28	28	-1	3	3	4	.	.	10	10	-2	8	8	-4	.	.	.	2	2	2
$\chi_7^{(7)}$	35	35	.	.	.	-5	.	.	5	5	1	7	7	3	-3	-3	.	-2	-2	6
$\chi_7^{(8)}$	35	35	.	.	.	-5	.	.	5	5	1	7	7	3	3	3	.	-2	-2	6
$\chi_7^{(9)}$	50	50	.	.	.	10	.	.	5	5	.	-2	-2	18	2	2	-1	-1	1	-3
$\chi_7^{(10)}$	50	50	.	.	.	10	.	.	5	5	.	-2	-2	18	-2	-2	1	1	1	-3
$\chi_7^{(11)}$	56	-56	.	-4	4	.	1	-1	-16	16	.	12	-12	.	2	-2	-1	1	3	-3
$\chi_7^{(12)}$	56	-56	.	-4	4	.	1	-1	-16	16	.	12	-12	.	-2	2	1	-1	3	-3
$\chi_7^{(13)}$	70	70	1	5	5	6	-1	-1	19	19	2	14	14	6	.	.	.	2	2	-6
$\chi_7^{(14)}$	84	84	-1	-1	-1	4	-1	-1	-6	-6	.	4	4	20	2	2	-1	-1	1	5
$\chi_7^{(15)}$	84	84	-1	-1	-1	4	-1	-1	-6	-6	.	4	4	20	-2	-2	1	1	1	5
$\chi_7^{(16)}$	112	-112	.	2	-2	.	1	-1	4	-4	.	8	-8	.	-4	4	-1	1	-1	-9
$\chi_7^{(17)}$	112	-112	.	2	-2	.	1	-1	4	-4	.	8	-8	.	4	-4	1	-1	-1	-9
$\chi_7^{(18)}$	160	-160	.	.	.	.	.	.	-20	20	.	16	-16	.	.	.	.	-2	2	-6
$\chi_7^{(19)}$	160	-160	.	.	.	.	.	.	-20	20	.	16	-16	.	.	.	.	-2	2	-6
$\chi_7^{(20)}$	168	168	-1	3	3	24	.	.	15	15	.	8	8	40	.	.	.	-4	-4	4
$\chi_7^{(21)}$	175	175	.	.	.	15	.	.	-5	-5	-1	-1	-1	-17	1	1	1	-1	-1	-5
$\chi_7^{(22)}$	175	175	.	.	.	15	.	.	-5	-5	-1	-1	-1	-17	-1	-1	-1	-1	-1	-5
$\chi_7^{(23)}$	210	210	.	.	.	10	.	.	-15	-15	.	6	6	-14	-2	-2	1	1	3	7
$\chi_7^{(24)}$	210	210	.	.	.	10	.	.	-15	-15	.	6	6	-14	2	2	-1	-1	3	7
$\chi_7^{(25)}$	300	300	.	.	.	20	.	.	30	30	2	8	8	12	.	.	.	2	2	6
$\chi_7^{(26)}$	300	300	.	.	.	20	.	.	30	30	2	8	8	12	.	.	.	2	2	6
$\chi_7^{(27)}$	350	350	.	.	.	-10	.	.	35	35	.	26	26	-2	4	4	1	1	-1	-5
$\chi_7^{(28)}$	350	350	.	.	.	-10	.	.	35	35	.	26	26	-2	-4	-4	-1	-1	-1	-5
$\chi_7^{(29)}$	400	-400	.	.	.	.	.	.	-20	20	.	-8	8	.	-4	4	-1	1	-1	9
$\chi_7^{(30)}$	400	-400	.	.	.	.	.	.	-20	20	.	-8	8	.	4	-4	1	-1	-1	9
$\chi_7^{(31)}$	420	420	1	5	5	36	-1	-1	24	24	.	12	12	-28	.	.	.	-6	-6	2
$\chi_7^{(32)}$	448	-448	.	-2	2	.	-1	1	-44	44	.	32	-32	.	.	.	.	-4	4	12
$\chi_7^{(33)}$	448	-448	.	-2	2	.	-1	1	16	-16	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(34)}$	448	-448	.	-2	2	.	-1	1	16	-16	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(35)}$	525	525	.	.	.	5	.	.	30	30	-1	-7	-7	45	-3	-3	.	2	2	6
$\chi_7^{(36)}$	525	525	.	.	.	5	.	.	30	30	-1	-7	-7	45	3	3	.	2	2	6
$\chi_7^{(37)}$	560	-560	.	.	.	.	.	.	20	-20	.	8	-8	.	.	.	.	2	-2	-6
$\chi_7^{(38)}$	560	-560	.	.	.	.	.	.	20	-20	.	8	-8	.	.	.	.	2	-2	-6
$\chi_7^{(39)}$	567	567	1	-3	-3	-9	.	.	.	.	-1	15	15	-9	1	1	1	-3	-3	9
$\chi_7^{(40)}$	567	567	1	-3	-3	-9	.	.	.	.	-1	15	15	-9	-1	-1	-1	-3	-3	9
$\chi_7^{(41)}$	700	700	.	.	.	-20	.	.	10	10	.	-4	-4	-4	2	2	-1	-1	-1	-1
$\chi_7^{(42)}$	700	700	.	.	.	-20	.	.	10	10	.	-4	-4	-4	-2	-2	1	1	-1	-1
$\chi_7^{(43)}$	700	700	.	.	.	20	.	.	-20	-20	2	.	.	92	.	.	.	.	.	-4
$\chi_7^{(44)}$	700	700	.	.	.	20	.	.	-20	-20	2	.	.	92	.	.	.	.	.	-4
$\chi_7^{(45)}$	840	-840	.	.	.	.	.	.	-60	60	.	20	-20	.	-2	2	1	-1	5	-3

	10												20									
$\chi_7^{(46)}$	840	-840	.	.	.	.	.	.	-60	60	.	20	-20	.	2	-2	-1	1	5	-5	-3	3
$\chi_7^{(47)}$	840	840	.	.	.	-40	.	.	30	30	.	16	16	8	.	.	.	.	4	4	8	8
$\chi_7^{(48)}$	840	840	.	.	.	-40	.	.	30	30	.	16	16	8	.	.	.	.	4	4	8	8
$\chi_7^{(49)}$	972	972	1	-3	-3	36	.	.	.	.	-2	.	.	108	.	.	.	.	.	.	.	.
$\chi_7^{(50)}$	972	972	1	-3	-3	36	.	.	.	.	-2	.	.	108	.	.	.	.	.	.	.	.
$\chi_7^{(51)}$	1008	-1008	.	-2	2	.	-1	1	36	-36	.	8	-8	.	.	.	.	.	2	-2	-6	6
$\chi_7^{(52)}$	1008	-1008	.	-2	2	.	-1	1	36	-36	.	8	-8	.	.	.	.	.	2	-2	-6	6
$\chi_7^{(53)}$	1050	1050	.	.	.	-30	.	.	15	15	.	-10	-10	58	4	4	1	1	-1	-1	-17	-17
$\chi_7^{(54)}$	1050	1050	.	.	.	-30	.	.	15	15	.	-10	-10	58	-4	-4	-1	-1	-1	-1	-17	-17
$\chi_7^{(55)}$	1134	1134	.	4	4	30	1	1	81	81	-2	30	30	-18	.	.	.	.	.	.	.	.
$\chi_7^{(56)}$	1296	-1296	.	6	-6	.	.	.	.	.	.	24	-24	.	4	-4	1	-1	-3	3	9	-9
$\chi_7^{(57)}$	1296	-1296	.	6	-6	.	.	.	.	.	.	24	-24	.	-4	4	-1	1	-3	3	9	-9
$\chi_7^{(58)}$	1344	1344	.	4	4	.	1	1	-24	-24	.	.	.	64	.	.	.	.	.	.	4	4
$\chi_7^{(59)}$	1344	1344	.	4	4	.	1	1	-24	-24	.	.	.	64	.	.	.	.	.	.	4	4
$\chi_7^{(60)}$	1344	-1344	.	-6	6	.	.	.	-60	60	.	32	-32	.	.	.	.	.	-4	4	-12	12
$\chi_7^{(61)}$	1400	1400	.	.	.	40	.	.	50	50	.	-16	-16	-72	.	.	.	.	2	2	-6	-6
$\chi_7^{(62)}$	1400	1400	.	.	.	40	.	.	50	50	.	-16	-16	-72	.	.	.	.	2	2	-6	-6
$\chi_7^{(63)}$	1400	-1400	.	.	.	.	.	.	-40	40	.	-4	4	.	-2	2	1	-1	-1	1	-9	9
$\chi_7^{(64)}$	1400	-1400	.	.	.	.	.	.	20	-20	.	-4	4	.	-2	2	1	-1	-1	1	15	-15
$\chi_7^{(65)}$	1400	-1400	.	.	.	.	.	.	-40	40	.	-4	4	.	2	-2	-1	1	-1	1	-9	9
$\chi_7^{(66)}$	1400	-1400	.	.	.	.	.	.	20	-20	.	-4	4	.	2	-2	-1	1	-1	1	15	-15
$\chi_7^{(67)}$	1400	1400	.	.	.	40	.	.	65	65	.	-8	-8	-8	.	.	.	.	4	4	4	4
$\chi_7^{(68)}$	1575	1575	.	.	.	15	.	.	-45	-45	1	11	11	-57	3	3	.	.	2	2	-6	-6
$\chi_7^{(69)}$	1575	1575	.	.	.	15	.	.	-45	-45	1	11	11	-57	-3	-3	.	.	2	2	-6	-6
$\chi_7^{(70)}$	1680	1680	-1	-5	-5	-16	1	1	6	6	.	32	32	16	.	.	.	.	-4	-4	-20	-20
$\chi_7^{(71)}$	2016	-2016	.	-4	4	.	1	-1	-36	36	.	16	-16	.	.	.	.	.	-2	2	6	-6
$\chi_7^{(72)}$	2100	2100	.	.	.	20	.	.	-60	-60	.	12	12	52	2	2	-1	-1	3	3	-5	-5
$\chi_7^{(73)}$	2100	2100	.	.	.	20	.	.	-60	-60	.	12	12	52	-2	-2	1	1	3	3	-5	-5
$\chi_7^{(74)}$	2100	2100	.	.	.	20	.	.	30	30	.	-20	-20	116	.	.	.	.	-2	-2	14	14
$\chi_7^{(75)}$	2240	2240	.	.	.	.	.	.	-40	-40	.	.	.	-64	.	.	.	.	.	.	-4	-4
$\chi_7^{(76)}$	2240	2240	.	.	.	.	.	.	-40	-40	.	.	.	-64	.	.	.	.	.	.	-4	-4
$\chi_7^{(77)}$	2268	2268	-1	3	3	-36	.	.	.	.	.	-12	-12	-36	2	2	-1	-1	-3	-3	9	9
$\chi_7^{(78)}$	2268	2268	-1	3	3	-36	.	.	.	.	.	-12	-12	-36	-2	-2	1	1	-3	-3	9	9
$\chi_7^{(79)}$	2400	-2400	.	.	.	.	.	.	60	-60	.	16	-16	.	.	.	.	.	4	-4	12	-12
$\chi_7^{(80)}$	2400	-2400	.	.	.	.	.	.	60	-60	.	16	-16	.	.	.	.	.	4	-4	12	-12
$\chi_7^{(81)}$	2688	2688	-1	3	3	64	.	.	60	60	.	.	.	128	.	.	.	.	.	.	-16	-16
$\chi_7^{(82)}$	2800	-2800	.	.	.	.	.	.	-80	80	.	-24	24	.	4	-4	1	-1	3	-3	-9	9
$\chi_7^{(83)}$	2800	-2800	.	.	.	.	.	.	-80	80	.	-24	24	.	-4	4	-1	1	3	-3	-9	9
$\chi_7^{(84)}$	2835	2835	.	.	.	-45	.	.	.	.	-1	3	3	-45	-1	-1	-1	-1	3	3	-9	-9
$\chi_7^{(85)}$	2835	2835	.	.	.	-45	.	.	.	.	-1	3	3	-45	1	1	1	1	3	3	-9	-9
$\chi_7^{(86)}$	3150	3150	.	.	.	30	.	.	45	45	2	22	22	-114	.	.	.	.	-2	-2	6	6
$\chi_7^{(87)}$	3200	3200	.	.	.	.	.	.	-40	-40	.	.	.	128	.	.	.	.	.	.	8	8
$\chi_7^{(88)}$	3200	3200	.	.	.	.	.	.	-40	-40	.	.	.	128	.	.	.	.	.	.	8	8
$\chi_7^{(89)}$	3240	-3240	.	.	.	.	.	.	.	.	.	-12	12	.	-2	2	1	-1	-3	3	9	-9
$\chi_7^{(90)}$	3240	-3240	.	.	.	.	.	.	.	.	.	-12	12	.	2	-2	-1	1	-3	3	9	-9

	10														20								
$\chi_7^{(91)}$	3360	-3360	.	.	.	.	.	.	-60	60	.	-16	16	.	.	.	.	.	2	-2	18	-18
$\chi_7^{(92)}$	3360	-3360	.	.	.	.	.	.	-60	60	.	-16	16	.	.	.	.	.	2	-2	18	-18
$\chi_7^{(93)}$	4096	4096	.	-4	-4	.	-1	-1	64	64	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(94)}$	4096	4096	.	-4	-4	.	-1	-1	64	64	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(95)}$	4096	-4096	.	-4	4	.	1	-1	64	-64	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(96)}$	4096	-4096	.	-4	4	.	1	-1	64	-64	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(97)}$	4200	4200	.	.	.	40	.	.	-30	-30	.	-8	-8	-24	.	.	.	.	-2	-2	-6	-6
$\chi_7^{(98)}$	4200	4200	.	.	.	40	.	.	-30	-30	.	-8	-8	-24	.	.	.	.	-2	-2	-6	-6
$\chi_7^{(99)}$	4200	-4200	.	.	.	.	.	.	60	-60	.	4	-4	.	2	-2	-1	1	1	-1	-3	3
$\chi_7^{(100)}$	4200	-4200	.	.	.	.	.	.	60	-60	.	4	-4	.	-2	2	1	-1	1	-1	-3	3
$\chi_7^{(101)}$	4200	4200	.	.	.	-40	.	.	15	15	.	24	24	104	.	.	.	.	.	.	8	8
$\chi_7^{(102)}$	4480	4480	-1	-5	-5	64	1	1	-44	-44	.	.	.	-128	.	.	.	.	.	.	16	16
$\chi_7^{(103)}$	4536	-4536	.	6	-6	.	.	.	.	.	.	12	-12	.	-2	2	1	-1	3	-3	-9	9
$\chi_7^{(104)}$	4536	-4536	.	6	-6	.	.	.	.	.	.	12	-12	.	2	-2	-1	1	3	-3	-9	9
$\chi_7^{(105)}$	4536	4536	1	1	1	-24	1	1	81	81	.	-24	-24	-72	.	.	.	.	.	.	.	.
$\chi_7^{(106)}$	5600	-5600	.	.	.	.	.	.	-100	100	.	16	-16	.	.	.	.	.	-2	2	6	-6
$\chi_7^{(107)}$	5600	-5600	.	.	.	.	.	.	20	-20	.	-16	16	.	.	.	.	.	-4	4	-12	12
$\chi_7^{(108)}$	5600	-5600	.	.	.	.	.	.	20	-20	.	-16	16	.	.	.	.	.	-4	4	-12	12
$\chi_7^{(109)}$	5670	5670	1	5	5	6	-1	-1	-81	-81	-2	6	6	-90	.	.	.	.	.	.	.	.
$\chi_7^{(110)}$	6075	6075	.	.	.	-45	.	.	.	.	1	-9	-9	27	-3	-3	.	.	.	.	.	.
$\chi_7^{(111)}$	6075	6075	.	.	.	-45	.	.	.	.	1	-9	-9	27	3	3	.	.	.	.	.	.
$\chi_7^{(112)}$	7168	-7168	.	-2	2	.	-1	1	16	-16	.	.	.	.	.	.	.	.	.	.	.	.
	30														40								
$\chi_7^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
$\chi_7^{(2)}$	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	-1	-1	-1	1	
$\chi_7^{(3)}$	5	-5	1	-1	-1	1	6	-6	1	-1	-1	1	1	-1	-2	2	-3	3	3	-3	-1	1	-1
$\chi_7^{(4)}$	5	-5	1	-1	1	-1	-6	6	1	-1	-1	1	-1	1	2	-2	-3	3	-3	3	1	-1	-1
$\chi_7^{(5)}$	10	10	14	14	1	1	1	1	1	1	-2	-2	5	5	2	2	.	.	-2
$\chi_7^{(6)}$	10	10	-14	-14	1	1	1	1	-1	-1	2	2	5	5	-2	-2	.	.	-2
$\chi_7^{(7)}$	14	14	-21	-21	-1	-1	-1	-1	1	1	-5	-5	3	3	-6	-6	.	.	2
$\chi_7^{(8)}$	14	14	21	21	-1	-1	-1	-1	-1	-1	5	5	3	3	6	6	.	.	2
$\chi_7^{(9)}$	5	5	1	1	1	1	-20	-20	-1	-1	-4	-4	2	2	-4	-4	.	.	-5	-5	-3	-3	1
$\chi_7^{(10)}$	5	5	1	1	-1	-1	20	20	-1	-1	-4	-4	-2	-2	4	4	.	.	5	5	3	3	1
$\chi_7^{(11)}$	11	-11	14	-14	1	-1	2	-2	.	.	6	-6	-6	6	-1	1	-1	1	1
$\chi_7^{(12)}$	11	-11	-14	14	1	-1	2	-2	.	.	-6	6	-6	6	1	-1	1	-1	1
$\chi_7^{(13)}$	10	10	1	1	-2	-2	6	6	2
$\chi_7^{(14)}$	21	21	42	42	.	.	3	3	1	1	10	10	-1	-1	9	9	1	1	5
$\chi_7^{(15)}$	21	21	-42	-42	.	.	3	3	-1	-1	-10	-10	-1	-1	-9	-9	-1	-1	5
$\chi_7^{(16)}$	31	-31	56	-56	-1	1	4	-4	-2	2	-8	8	.	.	11	-11	-1	1	-3
$\chi_7^{(17)}$	31	-31	-56	56	-1	1	4	-4	2	-2	8	-8	.	.	-11	11	1	-1	-3
$\chi_7^{(18)}$	34	-34	-1	1	-1	1	-64	64	-1	1	-2	2	-6	6	-4	4	-2	2	2
$\chi_7^{(19)}$	34	-34	-1	1	1	-1	64	-64	-1	1	-2	2	-6	6	4	-4	2	-2	2
$\chi_7^{(20)}$	-12	-12	.	.	.	.	.	.	.	6	6	.	.	.	.	-2	-2	.	.	.	.	-4
$\chi_7^{(21)}$	-5	-5	-35	-35	1	1	13	13	-3	-3	-3	-3	1	1	-5	-5	-1	-1	3
$\chi_7^{(22)}$	-5	-5	35	35	1	1	13	13	3	3	3	3	1	1	5	5	1	1	3

	30												40											
$\chi_7^{(23)}$	39	39	.	.	.	.	-84	-84	.	.	-6	-6	2	2	-4	-4	-2	-2	-9	-9	-1	-1	-1
$\chi_7^{(24)}$	39	39	.	.	.	.	84	84	.	.	-6	-6	-2	-2	4	4	-2	-2	9	9	1	1	-1
$\chi_7^{(25)}$	30	30	-1	-1	1	1	-90	-90	.	.	3	3	-1	-1	-10	-10	3	3	.	.	2	2	2	
$\chi_7^{(26)}$	30	30	-1	-1	-1	-1	90	90	.	.	3	3	1	1	10	10	3	3	.	.	-2	-2	2	
$\chi_7^{(27)}$	35	35	.	.	.	.	-70	-70	-1	-1	-1	-1	1	1	10	10	7	7	5	5	-1	-1	-1
$\chi_7^{(28)}$	35	35	.	.	.	.	70	70	-1	-1	-1	-1	-1	-1	-10	-10	7	7	-5	-5	1	1	-1
$\chi_7^{(29)}$	25	-25	1	-1	-1	1	-120	120	-1	1	4	-4	2	-2	8	-8	.	.	-15	15	3	-3	-1	
$\chi_7^{(30)}$	25	-25	1	-1	1	-1	120	-120	-1	1	4	-4	-2	2	-8	8	.	.	15	-15	-3	3	-1	
$\chi_7^{(31)}$	-30	-30	.	.	.	.	.	.	.	.	-12	-12	.	.	.	.	-4	-4	.	.	.	.	2
$\chi_7^{(32)}$	28	-28	.	.	.	.	.	.	-1	1	-2	2	.	.	.	.	-6	6	.	.	.	.	-4
$\chi_7^{(33)}$	16	-16	.	.	.	.	112	-112	-1	1	16	-16	-4	4	-16	16	.	.	4	-4	.	.	-8
$\chi_7^{(34)}$	16	-16	.	.	.	.	-112	112	-1	1	16	-16	4	-4	16	-16	.	.	-4	4	.	.	-8
$\chi_7^{(35)}$	30	30	.	.	.	.	-105	-105	.	.	12	12	-2	-2	7	7	.	.	.	.	-2	-2	2
$\chi_7^{(36)}$	30	30	.	.	.	.	105	105	.	.	12	12	2	2	-7	-7	.	.	.	.	2	2	2
$\chi_7^{(37)}$	74	-74	.	.	.	.	-196	196	1	-1	-7	7	-3	3	12	-12	3	-3	-16	16	.	.	-2
$\chi_7^{(38)}$	74	-74	.	.	.	.	196	-196	1	-1	-7	7	3	-3	-12	12	3	-3	16	-16	.	.	-2
$\chi_7^{(39)}$	81	81	.	.	.	.	189	189	.	.	.	.	.	.	-3	-3	.	.	9	9	-1	-1	-3
$\chi_7^{(40)}$	81	81	.	.	.	.	-189	-189	.	.	.	.	.	.	3	3	.	.	-9	-9	1	1	-3
$\chi_7^{(41)}$	55	55	.	.	.	.	-210	-210	1	1	7	7	-3	-3	-18	-18	-1	-1	-15	-15	-1	-1	3
$\chi_7^{(42)}$	55	55	.	.	.	.	210	210	1	1	7	7	3	3	18	18	-1	-1	15	15	1	1	3
$\chi_7^{(43)}$	-20	-20	.	.	.	.	-70	-70	1	1	-2	-2	-2	-2	10	10	2	2	-10	-10	-2	-2	-4
$\chi_7^{(44)}$	-20	-20	.	.	.	.	70	70	1	1	-2	-2	2	2	-10	-10	2	2	10	10	2	2	-4
$\chi_7^{(45)}$	21	-21	.	.	.	.	-126	126	.	.	3	-3	1	-1	10	-10	-3	3	9	-9	1	-1	-1
$\chi_7^{(46)}$	21	-21	.	.	.	.	126	-126	.	.	3	-3	-1	1	-10	10	-3	3	-9	9	-1	1	-1
$\chi_7^{(47)}$	-24	-24	.	.	.	.	-84	-84	.	.	3	3	1	1	-20	-20	-1	-1	6	6	-2	-2	.
$\chi_7^{(48)}$	-24	-24	.	.	.	.	84	84	.	.	3	3	-1	-1	20	20	-1	-1	-6	-6	2	2	.
$\chi_7^{(49)}$	.	.	-1	-1	1	1	162	162	.	.	.	.	.	.	18	18	.	.	.	.	.	.	.
$\chi_7^{(50)}$	.	.	-1	-1	-1	-1	-162	-162	.	.	.	.	.	.	-18	-18	.	.	.	.	.	.	.
$\chi_7^{(51)}$	90	-90	.	.	.	.	252	-252	.	.	9	-9	-3	3	12	-12	3	-3	.	.	.	.	6
$\chi_7^{(52)}$	90	-90	.	.	.	.	-252	252	.	.	9	-9	3	-3	-12	12	3	-3	.	.	.	.	6
$\chi_7^{(53)}$	15	15	.	.	.	.	-210	-210	.	.	-3	-3	1	1	-2	-2	1	1	-15	-15	1	1	-1
$\chi_7^{(54)}$	15	15	.	.	.	.	210	210	.	.	-3	-3	-1	-1	2	2	1	1	15	15	-1	-1	-1
$\chi_7^{(55)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(56)}$	81	-81	1	-1	-1	1	216	-216	.	.	.	.	.	.	24	-24	.	.	-9	9	-1	1	3
$\chi_7^{(57)}$	81	-81	1	-1	1	-1	-216	216	.	.	.	.	.	.	-24	24	.	.	9	-9	1	-1	3
$\chi_7^{(58)}$	84	84	.	.	.	.	336	336	.	.	-6	-6	-2	-2	16	16	-2	-2	6	6	-2	-2	4
$\chi_7^{(59)}$	84	84	.	.	.	.	-336	-336	.	.	-6	-6	2	2	-16	-16	-2	-2	-6	-6	2	2	4
$\chi_7^{(60)}$	-60	60	.	.	.	.	.	.	.	.	-6	6	.	.	.	.	6	-6	.	.	.	.	4
$\chi_7^{(61)}$	50	50	.	.	.	.	-280	-280	-1	-1	-4	-4	2	2	8	8	.	.	-10	-10	.	.	-2
$\chi_7^{(62)}$	50	50	.	.	.	.	280	280	-1	-1	-4	-4	-2	-2	-8	-8	.	.	10	10	.	.	-2
$\chi_7^{(63)}$	95	-95	.	.	.	.	350	-350	1	-1	-4	4	2	-2	-10	10	.	.	5	-5	1	-1	-3
$\chi_7^{(64)}$	-25	25	.	.	.	.	-210	210	1	-1	-13	13	-3	3	6	-6	-3	3	-15	15	1	-1	-3
$\chi_7^{(65)}$	95	-95	.	.	.	.	-350	350	1	-1	-4	4	-2	2	10	-10	.	.	-5	5	-1	1	-3
$\chi_7^{(66)}$	-25	25	.	.	.	.	210	-210	1	-1	-13	13	3	-3	-6	6	-3	3	15	-15	-1	1	-3
$\chi_7^{(67)}$	20	20	.	.	.	.	.	.	-1	-1	14	14	.	.	.	.	-2	-2	.	.	.	.	-4

	30										40												
$\chi_7^{(68)}$	90	90	.	.	.	.	-315	-315	.	.	9	9	-3	-3	21	21	-3	-3	.	.	.	.	-6
$\chi_7^{(69)}$	90	90	.	.	.	.	315	315	.	.	9	9	3	3	-21	-21	-3	-3	.	.	.	.	-6
$\chi_7^{(70)}$	60	60	.	.	.	.	.	.	.	.	6	6	.	.	.	.	-2	-2	.	.	.	.	4
$\chi_7^{(71)}$	-90	90	.	.	.	.	.	.	.	.	18	-18	.	.	.	.	6	-6	.	.	.	.	-6
$\chi_7^{(72)}$	75	75	.	.	.	.	-210	-210	.	.	-6	-6	2	2	14	14	-2	-2	15	15	-1	-1	3
$\chi_7^{(73)}$	75	75	.	.	.	.	210	210	.	.	-6	-6	-2	-2	-14	-14	-2	-2	-15	-15	1	1	3
$\chi_7^{(74)}$	30	30	.	.	.	.	.	.	.	.	-6	-6	.	.	.	.	2	2	.	.	.	.	6
$\chi_7^{(75)}$	-4	-4	.	.	.	.	-336	-336	-1	-1	-10	-10	2	2	-16	-16	2	2	-6	-6	-2	-2	4
$\chi_7^{(76)}$	-4	-4	.	.	.	.	336	336	-1	-1	-10	-10	-2	-2	16	16	2	2	6	6	2	2	4
$\chi_7^{(77)}$	81	81	.	.	.	.	378	378	.	.	.	.	.	.	-6	-6	.	.	-9	-9	1	1	-3
$\chi_7^{(78)}$	81	81	.	.	.	.	-378	-378	.	.	.	.	.	.	6	6	.	.	9	9	-1	-1	-3
$\chi_7^{(79)}$	60	-60	-1	1	-1	1	-120	120	.	.	-3	3	-3	3	-24	24	3	-3	.	.	.	.	-4
$\chi_7^{(80)}$	60	-60	-1	1	1	-1	120	-120	.	.	-3	3	3	-3	24	-24	3	-3	.	.	.	.	-4
$\chi_7^{(81)}$	-48	-48	.	.	.	.	.	.	.	.	-12	-12	.	.	.	.	-4	-4	.	.	.	.	.
$\chi_7^{(82)}$	55	-55	.	.	.	.	-280	280	-1	1	-8	8	.	.	-24	24	.	.	5	-5	3	-3	1
$\chi_7^{(83)}$	55	-55	.	.	.	.	280	-280	-1	1	-8	8	.	.	24	-24	.	.	-5	5	-3	3	1
$\chi_7^{(84)}$	-81	-81	.	.	.	.	-189	-189	.	.	.	.	.	.	3	3	.	.	-9	-9	1	1	3
$\chi_7^{(85)}$	-81	-81	.	.	.	.	189	189	.	.	.	.	.	.	-3	-3	.	.	9	9	-1	-1	3
$\chi_7^{(86)}$	-90	-90	.	.	.	.	.	.	.	.	18	18	.	.	.	.	-6	-6	.	.	.	.	6
$\chi_7^{(87)}$	-40	-40	1	1	1	1	-160	-160	-1	-1	14	14	-2	-2	-32	-32	2	2	20	20	.	.	.
$\chi_7^{(88)}$	-40	-40	1	1	-1	-1	160	160	-1	-1	14	14	2	2	32	32	2	2	-20	-20	.	.	.
$\chi_7^{(89)}$	81	-81	-1	1	1	-1	-594	594	.	.	.	.	.	.	6	-6	.	.	-9	9	-1	1	3
$\chi_7^{(90)}$	81	-81	-1	1	-1	1	594	-594	.	.	.	.	.	.	-6	6	.	.	9	-9	1	-1	3
$\chi_7^{(91)}$	-6	6	.	.	.	.	-336	336	.	.	12	-12	2	-2	-16	16	.	.	-6	6	-4	4	2
$\chi_7^{(92)}$	-6	6	.	.	.	.	336	-336	.	.	12	-12	-2	2	16	-16	.	.	6	-6	4	-4	2
$\chi_7^{(93)}$	64	64	1	1	1	1	512	512	1	1	-8	-8	.	.	.	.	.	.	-16	-16	.	.	.
$\chi_7^{(94)}$	64	64	1	1	-1	-1	-512	-512	1	1	-8	-8	.	.	.	.	.	.	16	16	.	.	.
$\chi_7^{(95)}$	64	-64	1	-1	1	-1	512	-512	-1	1	-8	8	.	.	.	.	.	.	-16	16	.	.	.
$\chi_7^{(96)}$	64	-64	1	-1	-1	1	-512	512	-1	1	-8	8	.	.	.	.	.	.	16	-16	.	.	.
$\chi_7^{(97)}$	-30	-30	.	.	.	.	-420	-420	.	.	15	15	-1	-1	-4	-4	3	3	.	.	2	2	-2
$\chi_7^{(98)}$	-30	-30	.	.	.	.	420	420	.	.	15	15	1	1	4	4	3	3	.	.	-2	-2	-2
$\chi_7^{(99)}$	-75	75	.	.	.	.	-210	210	.	.	15	-15	1	-1	-26	26	-3	3	-15	15	1	-1	7
$\chi_7^{(100)}$	-75	75	.	.	.	.	210	-210	.	.	15	-15	-1	1	26	-26	-3	3	15	-15	-1	1	7
$\chi_7^{(101)}$	-120	-120	.	.	.	.	.	.	.	.	-12	-12	.	.	.	.	-4	-4	.	.	.	.	-8
$\chi_7^{(102)}$	-80	-80	.	.	.	.	.	.	1	1	-20	-20	.	.	.	.	4	4	.	.	.	.	.
$\chi_7^{(103)}$	-81	81	.	.	.	.	378	-378	.	.	.	.	.	.	-30	30	.	.	-9	9	-1	1	-3
$\chi_7^{(104)}$	-81	81	.	.	.	.	-378	378	.	.	.	.	.	.	30	-30	.	.	9	-9	1	-1	-3
$\chi_7^{(105)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(106)}$	-10	10	.	.	.	.	.	.	1	-1	2	-2	.	.	.	.	6	-6	.	.	.	.	2
$\chi_7^{(107)}$	20	-20	.	.	.	.	-280	280	1	-1	11	-11	-1	1	8	-8	-3	3	20	-20	.	.	-4
$\chi_7^{(108)}$	20	-20	.	.	.	.	280	-280	1	-1	11	-11	1	-1	-8	8	-3	3	-20	20	.	.	-4
$\chi_7^{(109)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(110)}$	.	.	-1	-1	1	1	-405	-405	.	.	.	.	.	.	27	27	.	.	.	.	.	.	.
$\chi_7^{(111)}$	.	.	-1	-1	-1	-1	405	405	.	.	.	.	.	.	-27	-27	.	.	.	.	.	.	.
$\chi_7^{(112)}$	-128	128	.	.	.	.	.	.	-1	1	-32	32	.	.	.	.	.	.	.	.	.	.	.

	50										60										70									
$\chi_7^{(46)}$	1	4	-4	-4	4	-1	1	-2	2	5	-5	.	2	-2	.	.	.	-6	6	.	.	.	.	.	.
$\chi_7^{(47)}$	.	24	24	4	4	.	.	.	.	-2	-2	4	-4	-4	8	.	-1	3	3	-10	-1	-1	-1	4	4
$\chi_7^{(48)}$	.	24	24	-4	-4	.	.	.	.	2	2	-4	4	4	8	.	-1	3	3	-10	-1	-1	-1	-4	-4
$\chi_7^{(49)}$	.	36	36	-6	-6	.	.	.	.	.	.	18	6	6	12	8	.	.	.	.	.	.	6	2	
$\chi_7^{(50)}$	.	36	36	6	6	.	.	.	.	.	.	-18	-6	-6	12	8	.	.	.	.	.	.	-6	-2	
$\chi_7^{(51)}$	-6	24	-24	-24	24	2	-2	4	-4	.	.	.	-4	4	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(52)}$	-6	24	-24	24	-24	2	-2	4	-4	.	.	.	4	-4	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(53)}$	-1	50	50	10	10	-1	-1	2	2	1	1	-14	2	2	-6	-2	-2	6	6	7	4	.	.	6	2					
$\chi_7^{(54)}$	-1	50	50	-10	-10	-1	-1	2	2	-1	-1	14	-2	-2	-6	-2	-2	6	6	7	4	.	.	-6	-2					
$\chi_7^{(55)}$	.	-18	-18	.	.	.	.	6	6	.	.	.	.	.	-18	-2	.	.	.	9					
$\chi_7^{(56)}$	-3	-24	24	-16	16	-1	1	4	-4	-3	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(57)}$	-3	-24	24	16	-16	-1	1	4	-4	3	-3	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(58)}$	4	64	64	16	16	.	.	.	.	-2	-2	16	.	.	.	.	-2	-6	-6	-8	4				
$\chi_7^{(59)}$	4	64	64	-16	-16	.	.	.	.	2	2	-16	.	.	.	.	-2	-6	-6	-8	4				
$\chi_7^{(60)}$	-4	32	-32	.	.	.	.	.	.	.	.	.	.	.	.	.	.	12	-12	.	.	.	.	.	.
$\chi_7^{(61)}$	-2	40	40	.	.	.	.	.	.	2	2	16	.	.	-8	.	-3	5	5	-6	-3	1	1	-8	.
$\chi_7^{(62)}$	-2	40	40	.	.	.	.	.	.	-2	-2	-16	.	.	-8	.	-3	5	5	-6	-3	1	1	8	.
$\chi_7^{(63)}$	3	60	-60	-20	20	1	-1	2	-2	-1	1	.	-6	6	.	.	.	-4	4	.	.	.	.	.	.
$\chi_7^{(64)}$	3	60	-60	-20	20	1	-1	2	-2	3	-3	.	10	-10	.	.	.	8	-8	.	.	.	.	.	.
$\chi_7^{(65)}$	3	60	-60	20	-20	1	-1	2	-2	1	-1	.	6	-6	.	.	.	-4	4	.	.	.	.	.	.
$\chi_7^{(66)}$	3	60	-60	20	-20	1	-1	2	-2	-3	3	.	-10	10	.	.	.	8	-8	.	.	.	.	.	.
$\chi_7^{(67)}$	-4	-40	-40	.	.	.	.	.	.	.	.	.	.	.	24	-8	-2	8	8	1	4	-2	.	.	.
$\chi_7^{(68)}$	-6	15	15	-15	-15	2	2	-1	-1	.	.	9	-7	-7	-9	3	.	.	3	.	.	.	-3	1						
$\chi_7^{(69)}$	-6	15	15	15	15	2	2	-1	-1	.	.	-9	7	7	-9	3	.	.	3	.	.	.	3	-1						
$\chi_7^{(70)}$	4	-80	-80	.	.	.	.	.	.	.	.	.	.	.	16	.	-2	6	6	-2	-2	2	-2	.	.
$\chi_7^{(71)}$	6	48	-48	.	.	-2	2	8	-8	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(72)}$	3	-60	-60	-10	-10	-1	-1	-4	-4	-1	-1	-10	6	6	4	-4	1	3	3	4	1	-1	1	-2	-2					
$\chi_7^{(73)}$	3	-60	-60	10	10	-1	-1	-4	-4	1	1	10	-6	-6	4	-4	1	3	3	4	1	-1	1	2	2					
$\chi_7^{(74)}$	6	-60	-60	.	.	2	2	-4	-4	.	.	.	.	.	-12	-4	2	12	12	-10	-4	2	.	.	.
$\chi_7^{(75)}$	4	64	64	16	16	.	.	.	.	2	2	16	.	.	.	.	2	2	2	8	-4				
$\chi_7^{(76)}$	4	64	64	-16	-16	.	.	.	.	-2	-2	-16	.	.	.	.	2	2	2	8	-4				
$\chi_7^{(77)}$	-3	12	12	10	10	-1	-1	-4	-4	3	3	-6	-6	-6	12	4	.	.	.	.	.	.	-6	2	
$\chi_7^{(78)}$	-3	12	12	-10	-10	-1	-1	-4	-4	-3	-3	6	6	6	12	4	.	.	.	.	.	.	6	-2	
$\chi_7^{(79)}$	4	-80	80	.	.	.	.	.	.	.	.	.	-8	8	.	.	.	6	-6	.	.	.	.	.	.
$\chi_7^{(80)}$	4	-80	80	.	.	.	.	.	.	.	.	.	8	-8	.	.	.	6	-6	.	.	.	.	.	.
$\chi_7^{(81)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2	-12	-12	-4	-4	-2	.	.	.
$\chi_7^{(82)}$	-1	-40	40	.	.	-1	1	4	-4	3	-3	.	.	.	.	.	.	10	-10	.	.	.	.	.	.
$\chi_7^{(83)}$	-1	-40	40	.	.	-1	1	4	-4	-3	3	.	.	.	.	.	.	10	-10	.	.	.	.	.	.
$\chi_7^{(84)}$	3	51	51	19	19	1	1	-5	-5	3	3	3	3	3	3	3	.	.	.	.	.	.	3	-5	
$\chi_7^{(85)}$	3	51	51	-19	-19	1	1	-5	-5	-3	-3	-3	-3	-3	3	3	.	.	.	.	.	.	-3	5	
$\chi_7^{(86)}$	6	30	30	.	.	-2	-2	-2	-2	.	.	.	.	.	-18	6	.	.	.	-3					
$\chi_7^{(87)}$	.	.	.	.	.	.	.	.	.	4	4	.	.	.	.	.	-4	-4	-4	8	-4				
$\chi_7^{(88)}$	.	.	.	.	.	.	.	.	.	-4	-4	.	.	.	.	.	-4	-4	-4	8	-4				
$\chi_7^{(89)}$	-3	84	-84	-4	4	-1	1	-2	2	-3	3	.	-6	6	.	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(90)}$	-3	84	-84	4	-4	-1	1	-2	2	3	-3	.	6	-6	.	.	.	.	.	.	.	.	.	.	.

	50										60										70									
$\chi_7^{(91)}$	-2	16	-16	-16	16	.	.	.	.	2	-2	.	.	.	.	.	.	-6	6	.	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(92)}$	-2	16	-16	16	-16	.	.	.	.	-2	2	.	.	.	.	.	.	-6	6	.	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(93)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-8	-8	.	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(94)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-8	-8	.	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(95)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-8	8	.	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(96)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-8	8	.	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(97)}$	-2	40	40	20	20	.	.	.	.	-4	-4	4	4	4	8	-8	3	-3	-3	-6	3	1	-1	-4	4	.	.	.	.	.
$\chi_7^{(98)}$	-2	40	40	-20	-20	.	.	.	.	4	4	-4	-4	-4	8	-8	3	-3	-3	-6	3	1	-1	4	-4	.	.	.	.	.
$\chi_7^{(99)}$	-7	20	-20	-20	20	-1	1	-2	2	-5	5	.	2	-2	.	.	.	6	-6	.	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(100)}$	-7	20	-20	20	-20	-1	1	-2	2	5	-5	.	-2	2	.	.	.	6	-6	.	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(101)}$	-8	40	40	.	.	.	.	.	.	.	.	.	.	.	8	-8	2	6	6	-1	2	2	2	.	.	.	.	.	.	.
$\chi_7^{(102)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-2	4	4	4	4	-2	.	.	.	.	.	.	.	.
$\chi_7^{(103)}$	3	60	-60	20	-20	1	-1	2	-2	-3	3	.	6	-6	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(104)}$	3	60	-60	-20	20	1	-1	2	-2	3	-3	.	-6	6	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(105)}$	.	-72	-72	.	.	.	.	.	.	.	.	.	.	.	24	8	.	.	.	9	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(106)}$	-2	-80	80	.	.	2	-2	-8	8	.	.	.	.	.	.	.	.	-4	4	.	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(107)}$	4	-80	80	.	.	.	.	.	.	-4	4	.	8	-8	.	.	.	2	-2	.	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(108)}$	4	-80	80	.	.	.	.	.	.	4	-4	.	-8	8	.	.	.	2	-2	.	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(109)}$	.	-90	-90	.	.	.	.	6	6	.	.	.	.	.	6	6	.	.	.	-9	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(110)}$	.	-45	-45	15	15	.	.	3	3	.	.	-9	-9	-9	-21	-1	.	.	.	.	.	.	.	.	.	.	3	-1	.	.
$\chi_7^{(111)}$	.	-45	-45	-15	-15	.	.	3	3	.	.	9	9	9	-21	-1	.	.	.	.	.	.	.	.	.	.	-3	1	.	.
$\chi_7^{(112)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-8	8	.	.	.	.	.	.	.	.	.	.	.
	80										90																			
$\chi_7^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_7^{(2)}$	-1	-1	-1	-1	-1	1	1	-1	-1	1	1	-1	1	1	1	-1	-1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_7^{(3)}$	3	-3	-1	1	.	2	-2	.	.	-2	2	.	.	.	-3	3	1	-1	1	-1	.	.	-2	2	.	.	.	.	.	.
$\chi_7^{(4)}$	-3	3	1	-1	.	2	-2	.	.	-2	2	.	.	.	-3	3	-1	1	1	-1	.	.	-2	2	.	.	.	.	.	.
$\chi_7^{(5)}$	5	5	-1	-1	-1	1	1	1	.	2	2	.	.	-2	3	3	1	1	-1	-1	.	.	2	2	.	.	.	.	.	.
$\chi_7^{(6)}$	-5	-5	1	1	1	1	1	-1	.	2	2	.	.	-2	3	3	-1	-1	-1	-1	.	.	2	2	.	.	.	.	.	.
$\chi_7^{(7)}$	-3	-3	-1	-1	.	2	2	2	1	1	1	1	-1	1	5	5	1	1	1	1	-1	-1	1	1	.	.	.	.	.	.
$\chi_7^{(8)}$	3	3	1	1	.	2	2	-2	-1	1	1	-1	-1	1	5	5	-1	-1	1	1	-1	-1	1	1	.	.	.	.	.	.
$\chi_7^{(9)}$	-2	-2	.	.	-1	1	1	1	-2	.	.	.	2	1	.	.	.	.	.	.	.	.	1	1	.	.	.	.	.	.
$\chi_7^{(10)}$	2	2	.	.	1	1	1	-1	2	.	.	.	2	1	.	.	.	.	.	.	.	.	1	1	.	.	.	.	.	.
$\chi_7^{(11)}$	4	-4	2	-2	.	-2	2	.	.	-2	2	.	.	.	-1	1	1	-1	-1	1	1	-1	.	.	.	.	.	.	.	.
$\chi_7^{(12)}$	-4	4	-2	2	.	-2	2	.	.	-2	2	.	.	.	-1	1	-1	1	-1	1	1	-1	.	.	.	.	.	.	.	.
$\chi_7^{(13)}$	.	.	.	.	.	-4	-4	.	.	2	2	.	-2	3	.	.	.	.	.	.	.	.	-1	-1	.	.	.	.	.	.
$\chi_7^{(14)}$	-3	-3	-1	-1	-1	-1	-1	1	2	.	.	.	.	-2	4	4	.	.	.	.	.	1	1	-2	-2	.	.	.	.	.
$\chi_7^{(15)}$	3	3	1	1	1	-1	-1	-1	-2	.	.	.	.	-2	4	4	.	.	.	.	.	1	1	-2	-2	.	.	.	.	.
$\chi_7^{(16)}$	-2	2	.	.	.	.	.	.	.	.	.	.	.	.	-7	7	-1	1	1	-1	1	-1	2	-2	.	.	.	.	.	.
$\chi_7^{(17)}$	2	-2	.	.	.	.	.	.	.	.	.	.	.	.	-7	7	1	-1	1	-1	1	-1	2	-2	.	.	.	.	.	.
$\chi_7^{(18)}$	-8	8	.	.	.	2	-2	.	.	.	.	.	.	.	-5	5	1	-1	-1	1	-1	1	-2	2	.	.	.	.	.	.
$\chi_7^{(19)}$	8	-8	.	.	.	2	-2	.	.	.	.	.	.	.	-5	5	-1	1	-1	1	-1	1	-2	2	.	.	.	.	.	.
$\chi_7^{(20)}$	.	.	.	.	.	2	2	.	.	.	.	.	.	3	-2	-2	.	.	-2	-2	-2	-2	-1	-1	.	.	.	.	.	.
$\chi_7^{(21)}$	1	1	-1	-1	.	.	.	2	1	-1	-1	-1	3	3	.	.	.	.	.	.	.	.	-1	-1	.	.	.	.	.	.
$\chi_7^{(22)}$	-1	-1	1	1	.	.	.	-2	-1	-1	-1	1	3	3	.	.	.	.	.	.	.	.	-1	-1	.	.	.	.	.	.

	80													90												
$\chi_7^{(68)}$	9	9	-1	-1	.	.	.	.	-1	1	1	1	-1	3	.	.	.	.	.	.	.	.	-1	-1
$\chi_7^{(69)}$	-9	-9	1	1	.	.	.	.	1	1	1	-1	-1	3	.	.	.	.	.	.	.	.	-1	-1
$\chi_7^{(70)}$	.	.	.	.	.	-2	-2	.	.	.	.	.	.	2	.	.	.	.	.	.	.	.	2	2
$\chi_7^{(71)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-6	6	.	.	2	-2	.	.	-2	2
$\chi_7^{(72)}$	6	6	.	.	1	3	3	-1	2	.	.	.	.	-4	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(73)}$	-6	-6	.	.	-1	3	3	1	-2	.	.	.	.	-4	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(74)}$	.	.	.	.	.	.	.	.	.	.	.	.	-4	2	.	.	.	.	.	.	.	.	-2	-2
$\chi_7^{(75)}$	6	6	.	.	.	-2	-2	-2	.	.	.	.	.	.	-5	-5	1	1	-1	-1	1	1	.	.
$\chi_7^{(76)}$	-6	-6	.	.	.	-2	-2	2	.	.	.	.	.	.	-5	-5	-1	-1	-1	-1	1	1	.	.
$\chi_7^{(77)}$	.	.	.	.	.	.	.	.	2	.	.	.	.	.	-2	-2	.	.	2	2	1	1	.	.
$\chi_7^{(78)}$	.	.	.	.	.	.	.	.	-2	.	.	.	.	.	-2	-2	.	.	2	2	1	1	.	.
$\chi_7^{(79)}$	3	-3	1	-1	.	2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-2	2
$\chi_7^{(80)}$	-3	3	-1	1	.	2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-2	2
$\chi_7^{(81)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	4	8	8	.	.	.	.	2	2	.	.
$\chi_7^{(82)}$	-8	8	.	.	.	-2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(83)}$	8	-8	.	.	.	-2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(84)}$	.	.	.	.	.	.	.	.	-1	-1	-1	1	-1	.	5	5	-1	-1	1	1	-1	-1	.	.
$\chi_7^{(85)}$	.	.	.	.	.	.	.	.	1	-1	-1	-1	-1	.	5	5	1	1	1	1	-1	-1	.	.
$\chi_7^{(86)}$	.	.	.	.	.	.	.	.	2	2	.	-2	-3	.	.	.	.	.	.	.	.	.	1	1
$\chi_7^{(87)}$	2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(88)}$	-2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(89)}$	.	.	.	.	.	.	.	.	-2	2	.	.	.	.	5	-5	1	-1	1	-1	1	-1	.	.
$\chi_7^{(90)}$	.	.	.	.	.	.	.	.	-2	2	.	.	.	.	5	-5	-1	1	1	-1	1	-1	.	.
$\chi_7^{(91)}$	-6	6	.	.	.	2	-2	.	.	.	.	.	.	.	-5	5	-1	1	-1	1	-1	1	2	-2
$\chi_7^{(92)}$	6	-6	.	.	.	2	-2	.	.	.	.	.	.	.	-5	5	1	-1	-1	1	-1	1	2	-2
$\chi_7^{(93)}$	8	8	.	.	.	.	.	.	.	.	.	.	.	.	-4	-4	.	.	.	.	-1	-1	.	.
$\chi_7^{(94)}$	-8	-8	.	.	.	.	.	.	.	.	.	.	.	.	-4	-4	.	.	.	.	-1	-1	.	.
$\chi_7^{(95)}$	-8	8	.	.	.	.	.	.	.	.	.	.	.	.	4	-4	.	.	.	.	-1	1	.	.
$\chi_7^{(96)}$	8	-8	.	.	.	.	.	.	.	.	.	.	.	.	4	-4	.	.	.	.	-1	1	.	.
$\chi_7^{(97)}$	3	3	1	1	-1	1	1	1	.	.	.	.	.	-2	.	.	.	.	.	.	.	.	-2	-2
$\chi_7^{(98)}$	-3	-3	-1	-1	1	1	1	-1	.	.	.	.	.	-2	.	.	.	.	.	.	.	.	-2	-2
$\chi_7^{(99)}$	3	-3	-1	1	.	-2	2	.	.	2	-2	.	.	.	.	.	.	.	.	.	.	.	-2	2
$\chi_7^{(100)}$	-3	3	1	-1	.	-2	2	.	.	2	-2	.	.	.	.	.	.	.	.	.	.	.	-2	2
$\chi_7^{(101)}$	.	.	.	.	.	-2	-2	.	.	.	.	.	.	-1	.	.	.	.	.	.	.	.	3	3
$\chi_7^{(102)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	4	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(103)}$	.	.	.	.	.	.	.	.	-2	2	.	.	.	.	4	-4	.	.	.	.	-1	1	.	.
$\chi_7^{(104)}$	.	.	.	.	.	.	.	.	-2	2	.	.	.	.	4	-4	.	.	.	.	-1	1	.	.
$\chi_7^{(105)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	-3	6	6	.	.	-2	-2	.	.	-3	-3
$\chi_7^{(106)}$	.	.	.	.	.	-4	4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-2	2
$\chi_7^{(107)}$	1	-1	-1	1	.	2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2	-2
$\chi_7^{(108)}$	-1	1	1	-1	.	2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2	-2
$\chi_7^{(109)}$	.	.	.	.	.	.	.	.	-2	-2	.	-2	3	.	.	.	.	.	.	.	.	.	3	3
$\chi_7^{(110)}$	.	.	.	.	.	.	.	.	1	1	1	-1	3	.	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(111)}$	.	.	.	.	.	.	.	.	-1	1	1	1	3	.	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(112)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-8	8	.	.	.	.	.	2	-2	.

	100										110							
$\chi_7^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_7^{(2)}$	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1
$\chi_7^{(3)}$	.	.	-2	2	.	.	1	-1	2	-2	-3	3	.	.	-2	2	1	-1
$\chi_7^{(4)}$	.	.	-2	2	.	.	-1	1	-2	2	3	-3	.	.	2	-2	1	-1
$\chi_7^{(5)}$	.	.	1	1	-1	-1	-1	-1	2	2	4	4	-1	-1	1	1	-1	-1
$\chi_7^{(6)}$	.	.	1	1	1	1	1	1	-2	-2	-4	-4	1	1	-1	-1	-1	-1
$\chi_7^{(7)}$	-1	-1	2	2	.	.	-1	-1	-1	-1	-4	-4	.	.	-2	-2	1	1
$\chi_7^{(8)}$	-1	-1	2	2	.	.	1	1	1	1	4	4	.	.	2	2	1	1
$\chi_7^{(9)}$	-1	2	-1	-1	1	1	.	.	.	.	1	1	1	1	-1	-1	-2	-2
$\chi_7^{(10)}$	-1	2	-1	-1	-1	-1	.	.	.	.	-1	-1	-1	-1	1	1	-2	-2
$\chi_7^{(11)}$	.	.	1	-1	-1	1	-1	1	1	-1	-3	3	2	-2	.	.	.	.
$\chi_7^{(12)}$	.	.	1	-1	1	-1	1	-1	-1	1	3	-3	-2	2	.	.	.	.
$\chi_7^{(13)}$	-1	2	-2	-2	.	.	.	.	.	.	.	.	.	.	.	.	2	2
$\chi_7^{(14)}$	.	.	.	.	.	.	2	2	-1	-1	1	1	3	3	1	1	1	1
$\chi_7^{(15)}$	.	.	.	.	.	.	-2	-2	1	1	-1	-1	-3	-3	-1	-1	1	1
$\chi_7^{(16)}$	.	.	-1	1	-1	1	1	-1	-1	1	-3	3	2	-2	-2	2	2	-2
$\chi_7^{(17)}$	.	.	-1	1	1	-1	-1	1	1	-1	3	-3	-2	2	2	-2	2	-2
$\chi_7^{(18)}$	.	.	-1	1	-1	1	1	-1	-1	1	6	-6	2	-2	.	.	-2	2
$\chi_7^{(19)}$	.	.	-1	1	1	-1	-1	1	1	-1	-6	6	-2	2	.	.	-2	2
$\chi_7^{(20)}$	1	4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2	2
$\chi_7^{(21)}$	-1	-1	1	1	1	1	.	.	.	.	-1	-1	-2	-2	.	.	-1	-1
$\chi_7^{(22)}$	-1	-1	1	1	-1	-1	.	.	.	.	1	1	2	2	.	.	-1	-1
$\chi_7^{(23)}$	1	-2	.	.	.	.	1	1	1	1	-1	-1	3	3	-1	-1	.	.
$\chi_7^{(24)}$	1	-2	.	.	.	.	-1	-1	-1	-1	1	1	-3	-3	1	1	.	.
$\chi_7^{(25)}$	.	.	.	.	.	.	.	.	.	.	-2	-2	.	.	2	2	-1	-1
$\chi_7^{(26)}$	.	.	.	.	.	.	.	.	.	.	2	2	.	.	-2	-2	-1	-1
$\chi_7^{(27)}$	1	-2	-1	-1	-1	-1	.	.	.	.	-5	-5	-1	-1	1	1	-1	-1
$\chi_7^{(28)}$	1	-2	-1	-1	1	1	.	.	.	.	5	5	1	1	-1	-1	-1	-1
$\chi_7^{(29)}$	.	.	2	-2	.	.	.	.	.	.	-3	3	.	.	2	-2	-2	2
$\chi_7^{(30)}$	.	.	2	-2	.	.	.	.	.	.	3	-3	.	.	-2	2	-2	2
$\chi_7^{(31)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(32)}$	.	.	2	-2	.	.	.	.	.	.	.	.	.	.	.	.	2	-2
$\chi_7^{(33)}$	.	.	-1	1	1	-1	2	-2	1	-1	.	.	4	-4	2	-2	.	.
$\chi_7^{(34)}$	.	.	-1	1	-1	1	-2	2	-1	1	.	.	-4	4	-2	2	.	.
$\chi_7^{(35)}$	.	-3	.	.	.	.	.	.	.	.	2	2	-3	-3	1	1	2	2
$\chi_7^{(36)}$	.	-3	.	.	.	.	.	.	.	.	-2	-2	3	3	-1	-1	2	2
$\chi_7^{(37)}$	.	.	1	-1	-1	1	-1	1	1	-1	.	.	2	-2	.	.	-1	1
$\chi_7^{(38)}$	.	.	1	-1	1	-1	1	-1	-1	1	.	.	-2	2	.	.	-1	1
$\chi_7^{(39)}$	.	3	.	.	.	.	-1	-1	-1	-1	3	3	.	.	.	.	.	.
$\chi_7^{(40)}$	.	3	.	.	.	.	1	1	1	1	-3	-3	.	.	.	.	.	.
$\chi_7^{(41)}$.	.	-2	-2	3	3	-1	-1
$\chi_7^{(42)}$.	.	-2	-2	-3	-3	-1	-1
$\chi_7^{(43)}$.	.	1	1	-1	-1	-2	-2	5	5	1	1	.	.
$\chi_7^{(44)}$.	.	1	1	1	1	2	2	-5	-5	-1	-1	.	.
$\chi_7^{(45)}$	-1	1	1	-1	3	-3	.	.	-2	2	-1	1

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$\chi_7^{(46)}$	1	-1	-1	1	-3	3	.	.	2	-2	-1	1		
$\chi_7^{(47)}$	1	1	1	1	-2	-2	-3	-3	1	1	1	1		
$\chi_7^{(48)}$	-1	-1	-1	-1	2	2	3	3	-1	-1	1	1		
$\chi_7^{(49)}$	-3	-3		
$\chi_7^{(50)}$	3	3		
$\chi_7^{(51)}$	-3	3	-1	1		
$\chi_7^{(52)}$	3	-3	.	.	.	.	.	.	.	.	-1	1		
$\chi_7^{(53)}$	1	-2	.	.	.	.	.	.	.	.	1	1	.	.	-2	-2	-1	-1		
$\chi_7^{(54)}$	1	-2	.	.	.	.	.	.	.	.	-1	-1	.	.	2	2	-1	-1		
$\chi_7^{(55)}$	-1	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(56)}$	1	-1	-1	1	-3	3	.	.	.	.	.	.
$\chi_7^{(57)}$	-1	1	1	-1	3	-3	.	.	.	.	.	.
$\chi_7^{(58)}$	1	1	1	1	-2	-2	.	.	-2	-2	.	.		
$\chi_7^{(59)}$	-1	-1	-1	-1	2	2	.	.	2	2	.	.		
$\chi_7^{(60)}$	2	-2		
$\chi_7^{(61)}$.	.	-1	-1	-1	-1	.	.	.	.	4	4	-1	-1	-1	-1	2	2		
$\chi_7^{(62)}$.	.	-1	-1	1	1	.	.	.	.	-4	-4	1	1	1	1	2	2		
$\chi_7^{(63)}$.	.	1	-1	-1	1	.	.	.	.	3	-3	2	-2	2	-2	2	-2		
$\chi_7^{(64)}$.	.	-2	2	.	.	.	.	.	.	3	-3	.	.	.	.	-1	1		
$\chi_7^{(65)}$.	.	1	-1	1	-1	.	.	.	.	-3	3	-2	2	-2	2	2	-2		
$\chi_7^{(66)}$.	.	-2	2	.	.	.	.	.	.	-3	3	.	.	.	.	-1	1		
$\chi_7^{(67)}$	1	4	2	2	.	.	.	.	.	.	.	.	.	.	.	.	-2	-2		
$\chi_7^{(68)}$	-1	-1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	-1		
$\chi_7^{(69)}$	-1	-1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	-1		
$\chi_7^{(70)}$	2	2		
$\chi_7^{(71)}$	-2	2		
$\chi_7^{(72)}$	-1	-1	-3	-3	-1	-1	.	.		
$\chi_7^{(73)}$	1	1	3	3	1	1	.	.		
$\chi_7^{(74)}$	-2	-2		
$\chi_7^{(75)}$.	.	2	2	.	.	-1	-1	-1	-1	-2	-2	.	.	2	2	.	.		
$\chi_7^{(76)}$.	.	2	2	.	.	1	1	1	1	2	2	.	.	-2	-2	.	.		
$\chi_7^{(77)}$	-2	-2	1	1	-3	-3	.	.	.	.	.	.
$\chi_7^{(78)}$	2	2	-1	-1	3	3	.	.	.	.	.	.
$\chi_7^{(79)}$	-6	6	.	.	1	-1		
$\chi_7^{(80)}$	6	-6	.	.	1	-1		
$\chi_7^{(81)}$		
$\chi_7^{(82)}$.	.	-1	1	-1	1	.	.	.	.	-3	3	2	-2	.	.	.	.
$\chi_7^{(83)}$.	.	-1	1	1	-1	.	.	.	.	3	-3	-2	2	.	.	.	.
$\chi_7^{(84)}$.	3	.	.	.	.	1	1	1	1	-3	-3	.	.	.	.	.	.
$\chi_7^{(85)}$.	3	-1	-1	-1	-1	3	3		
$\chi_7^{(86)}$	1	-2	-2	-2		
$\chi_7^{(87)}$.	.	-1	-1	-1	-1	2	2	-2	-2	.	.		
$\chi_7^{(88)}$.	.	-1	-1	1	1	-2	-2	2	2	.	.		
$\chi_7^{(89)}$	1	-1	-1	1	-3	3		
$\chi_7^{(90)}$	-1	1	1	-1	3	-3		

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$\chi_7^{(91)}$	-1	1	1	-1	2	-2	2	-2
$\chi_7^{(92)}$	1	-1	-1	1	-2	2	2	-2
$\chi_7^{(93)}$.	.	1	1	-1	-1	2	2	-1	-1	.	.	-4	-4
$\chi_7^{(94)}$.	.	1	1	1	1	-2	-2	1	1	.	.	4	4
$\chi_7^{(95)}$.	.	-1	1	-1	1	2	-2	1	-1	.	.	-4	4
$\chi_7^{(96)}$.	.	-1	1	1	-1	-2	2	-1	1	.	.	4	-4	.	.	.	.
$\chi_7^{(97)}$	-2	-2	-3	-3	-1	-1	1	1
$\chi_7^{(98)}$	2	2	3	3	1	1	1	1
$\chi_7^{(99)}$	3	-3	.	.	-2	2	1	-1
$\chi_7^{(100)}$	-3	3	.	.	2	-2	1	-1
$\chi_7^{(101)}$	-1	-4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(102)}$.	.	-2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(103)}$	-2	2	-1	1	-3	3	.	.	.	.	.	.
$\chi_7^{(104)}$	2	-2	1	-1	3	-3	.	.	.	.	.	.
$\chi_7^{(105)}$	-1	-4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(106)}$.	.	-2	2	.	.	.	.	.	.	.	.	.	.	.	.	-2	2
$\chi_7^{(107)}$.	.	1	-1	-1	1	.	.	.	.	.	.	-4	4	2	-2	-1	1
$\chi_7^{(108)}$.	.	1	-1	1	-1	.	.	.	.	.	.	4	-4	-2	2	-1	1
$\chi_7^{(109)}$	1	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(110)}$.	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(111)}$.	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_7^{(112)}$.	.	2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.

The generators of G^{ss} are:

$$\begin{pmatrix} 1 & 1 & -1 & 0 & -1 & 1 & 1 & -1 \\ 0 & 1 & -1 & 0 & -1 & 2 & 1 & -2 \\ 1 & 1 & -1 & 0 & -2 & 3 & 1 & -2 \\ 1 & 1 & -2 & 1 & -3 & 4 & 2 & -4 \\ 1 & 0 & -2 & 1 & -2 & 3 & 2 & -3 \\ 1 & 0 & -2 & 1 & -2 & 3 & 1 & -2 \\ 0 & 0 & -1 & 1 & -2 & 2 & 1 & -1 \\ 0 & 0 & -1 & 1 & -1 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 1 & 0 & -1 & 1 & 0 & -1 & 1 & 0 \\ 1 & -1 & 0 & 1 & 0 & -1 & 1 & 0 \\ 1 & -1 & -1 & 2 & 0 & -1 & 1 & 0 \\ 0 & 0 & 0 & 1 & 0 & -1 & 1 & 0 \\ 0 & 0 & 0 & 1 & -1 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 1 & -1 & 0 & 0 & 1 & -1 \\ 0 & 1 & 2 & -2 & 0 & 0 & 2 & -2 \\ 0 & 0 & 3 & -2 & 0 & 0 & 2 & -2 \\ 0 & 0 & 4 & -3 & 0 & 0 & 4 & -4 \\ 0 & 0 & 3 & -3 & 1 & 0 & 3 & -3 \\ 0 & 0 & 2 & -2 & 0 & 1 & 2 & -2 \\ 0 & 0 & 1 & -1 & 0 & 0 & 2 & -1 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & -1 \end{pmatrix}, \\
\begin{pmatrix} 0 & -1 & 1 & 0 & -1 & 2 & -1 & 0 \\ 0 & -1 & 1 & 0 & -1 & 3 & -3 & 1 \\ 0 & -2 & 2 & 0 & -1 & 3 & -3 & 1 \\ 0 & -2 & 3 & -1 & -1 & 5 & -5 & 1 \\ 0 & -2 & 2 & 0 & -1 & 4 & -4 & 0 \\ 1 & -1 & 1 & 0 & -1 & 3 & -3 & 0 \\ 1 & -1 & 1 & 0 & -1 & 2 & -2 & 0 \\ 0 & 0 & 1 & 0 & -1 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 1 & -1 & 0 & 0 & 0 & -1 \\ 0 & 1 & 2 & -2 & 0 & 0 & 0 & -1 \\ 0 & 0 & 3 & -2 & 0 & 0 & 0 & -2 \\ 0 & 0 & 4 & -3 & 0 & 0 & 0 & -2 \\ 0 & 0 & 3 & -3 & 1 & 0 & 0 & -2 \\ 0 & 0 & 3 & -3 & 1 & 0 & 0 & -1 \\ 0 & 0 & 2 & -2 & 1 & -1 & 1 & -1 \\ 0 & 0 & 1 & -1 & 0 & 0 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 1 & -1 & 0 & 0 & 1 & -1 & -1 \\ 1 & 2 & -1 & -1 & 0 & 1 & -1 & -1 \\ 1 & 3 & -2 & -1 & 0 & 2 & -2 & -1 \\ 1 & 4 & -2 & -2 & 0 & 3 & -3 & -1 \\ 0 & 4 & -1 & -2 & 0 & 2 & -2 & -1 \\ 0 & 3 & -1 & -2 & 1 & 1 & -1 & -1 \\ 0 & 2 & 0 & -2 & 1 & 1 & -1 & -1 \\ 0 & 1 & 0 & -1 & 0 & 1 & 0 & -1 \end{pmatrix}.$$

The representatives of conjugacy classes of G^{ss} are:

$$\begin{pmatrix} 0 & -1 & 0 & 2 & -2 & 0 & 0 & 1 \\ 0 & -1 & 1 & 2 & -3 & 0 & 0 & 1 \\ 0 & -2 & 1 & 3 & -3 & -1 & 0 & 2 \\ 1 & -2 & 1 & 4 & -5 & -1 & 0 & 3 \\ 1 & -2 & 1 & 3 & -4 & 0 & -1 & 3 \\ 1 & -1 & 1 & 2 & -3 & 0 & -1 & 2 \\ 1 & -1 & 0 & 2 & -2 & 0 & -1 & 1 \\ 1 & -1 & 0 & 1 & -1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 0 & -1 & 2 & -1 & 1 & 0 \\ 0 & -2 & -1 & 0 & 2 & -1 & 2 & -1 \\ 0 & -2 & -1 & -1 & 3 & -1 & 2 & -1 \\ 0 & -4 & -1 & -1 & 4 & -1 & 3 & -2 \\ -1 & -3 & 0 & -1 & 3 & -1 & 3 & -2 \\ -1 & -3 & 0 & 0 & 2 & -1 & 2 & -1 \\ -1 & -2 & 0 & 0 & 1 & 0 & 1 & 0 \\ -1 & -1 & 0 & 0 & 1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 2 & 0 & -1 & 0 & 1 & -1 & -1 \\ 0 & 3 & 0 & -2 & 1 & 1 & -2 & 0 \\ 0 & 4 & 0 & -2 & 0 & 2 & -2 & -1 \\ -1 & 6 & 0 & -3 & 1 & 2 & -3 & -1 \\ 0 & 5 & -1 & -2 & 1 & 1 & -2 & -1 \\ 0 & 4 & -1 & -2 & 1 & 1 & -1 & -1 \\ 0 & 3 & 0 & -2 & 1 & 0 & 0 & -1 \\ 0 & 2 & 0 & -1 & 0 & 0 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 0 & 1 & 0 & 1 & -2 & 1 & -1 & 0 \\ 0 & 2 & 1 & 0 & -2 & 1 & -2 & 1 \\ 0 & 2 & 1 & 1 & -3 & 1 & -2 & 1 \\ 0 & 4 & 1 & 1 & -4 & 1 & -3 & 2 \\ 1 & 3 & 0 & 1 & -3 & 1 & -3 & 2 \\ 1 & 3 & 0 & 0 & -2 & 1 & -2 & 1 \\ 1 & 2 & 0 & 0 & -1 & 0 & -1 & 0 \\ 1 & 1 & 0 & 0 & -1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -2 & 0 & 1 & 0 & -1 & 1 & 1 \\ 0 & -3 & 0 & 2 & -1 & -1 & 2 & 0 \\ 0 & -4 & 0 & 2 & 0 & -2 & 2 & 1 \\ 1 & -6 & 0 & 3 & -1 & -2 & 3 & 1 \\ 0 & -5 & 1 & 2 & -1 & -1 & 2 & 1 \\ 0 & -4 & 1 & 2 & -1 & -1 & 1 & 1 \\ 0 & -3 & 0 & 2 & -1 & 0 & 0 & 1 \\ 0 & -2 & 0 & 1 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 0 & -2 & 2 & 0 & 0 & -1 \\ 0 & 1 & -1 & -2 & 3 & 0 & 0 & -1 \\ 0 & 2 & -1 & -3 & 3 & 1 & 0 & -2 \\ -1 & 2 & -1 & -4 & 5 & 1 & 0 & -3 \\ -1 & 2 & -1 & -3 & 4 & 0 & 1 & -3 \\ -1 & 1 & -1 & -2 & 3 & 0 & 1 & -2 \\ -1 & 1 & 0 & -2 & 2 & 0 & 1 & -1 \\ -1 & 1 & 0 & -1 & 1 & 0 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 0 & 0 & 0 & 1 & -1 & -1 & 1 & 1 \\ -1 & 0 & 1 & 1 & -2 & -1 & 2 & 1 \\ -1 & -1 & 1 & 2 & -2 & -2 & 2 & 2 \\ -1 & -1 & 1 & 3 & -4 & -2 & 3 & 3 \\ -1 & -1 & 1 & 2 & -3 & -1 & 2 & 3 \\ -1 & -1 & 1 & 2 & -3 & 0 & 1 & 2 \\ -1 & -1 & 0 & 2 & -2 & 0 & 1 & 1 \\ 0 & -1 & 0 & 1 & -1 & 0 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & -1 & 0 & -1 & 2 & -1 & 0 & 0 \\ 2 & -1 & -1 & -1 & 3 & -2 & 1 & -1 \\ 2 & -1 & -1 & -2 & 4 & -2 & 1 & -1 \\ 3 & -2 & -1 & -3 & 6 & -3 & 2 & -2 \\ 2 & -1 & 0 & -3 & 5 & -3 & 2 & -2 \\ 1 & -1 & 0 & -2 & 4 & -3 & 2 & -1 \\ 1 & 0 & 0 & -2 & 3 & -2 & 1 & 0 \\ 0 & 0 & 0 & -1 & 2 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 1 & 0 & 0 & -1 & 2 & -1 & -1 \\ -1 & 1 & 0 & 0 & -1 & 3 & -3 & 0 \\ -1 & 2 & 0 & 0 & -2 & 4 & -3 & -1 \\ -2 & 3 & 0 & 0 & -2 & 5 & -5 & -1 \\ -1 & 2 & -1 & 1 & -2 & 4 & -4 & -1 \\ 0 & 2 & -1 & 0 & -1 & 3 & -3 & -1 \\ 0 & 1 & 0 & 0 & -1 & 2 & -2 & -1 \\ 0 & 1 & 0 & 0 & -1 & 1 & -1 & 0 \end{pmatrix}, \\
\begin{pmatrix} -1 & 1 & 0 & 1 & -2 & 1 & 0 & 0 \\ -2 & 1 & 1 & 1 & -3 & 2 & -1 & 1 \\ -2 & 1 & 1 & 2 & -4 & 2 & -1 & 1 \\ -3 & 2 & 1 & 3 & -6 & 3 & -2 & 2 \\ -2 & 1 & 0 & 3 & -5 & 3 & -2 & 2 \\ -1 & 1 & 0 & 2 & -4 & 3 & -2 & 1 \\ -1 & 0 & 0 & 2 & -3 & 2 & -1 & 0 \\ 0 & 0 & 0 & 1 & -2 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & -1 & 0 & 0 & 1 & -2 & 1 & 1 \\ 1 & -1 & 0 & 0 & 1 & -3 & 3 & 0 \\ 1 & -2 & 0 & 0 & 2 & -4 & 3 & 1 \\ 2 & -3 & 0 & 0 & 2 & -5 & 5 & 1 \\ 1 & -2 & 1 & -1 & 2 & -4 & 4 & 1 \\ 0 & -2 & 1 & 0 & 1 & -3 & 3 & 1 \\ 0 & -1 & 0 & 0 & 1 & -2 & 2 & 1 \\ 0 & -1 & 0 & 0 & 1 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 0 & -1 & 1 & 1 & -1 & -1 \\ 1 & 0 & -1 & -1 & 2 & 1 & -2 & -1 \\ 1 & 1 & -1 & -2 & 2 & 2 & -2 & -2 \\ 1 & 1 & -1 & -3 & 4 & 2 & -3 & -3 \\ 1 & 1 & -1 & -2 & 3 & 1 & -2 & -3 \\ 1 & 1 & -1 & -2 & 3 & 0 & -1 & -2 \\ 1 & 1 & 0 & -2 & 2 & 0 & -1 & -1 \\ 0 & 1 & 0 & -1 & 1 & 0 & -1 & 0 \end{pmatrix}, \\
\begin{pmatrix} -1 & 1 & 1 & 0 & -1 & -1 & 2 & -1 \\ -2 & 0 & 2 & 0 & -1 & -1 & 3 & -2 \\ -2 & 0 & 2 & 1 & -2 & -2 & 4 & -2 \\ -3 & 0 & 3 & 1 & -3 & -2 & 6 & -4 \\ -2 & 0 & 2 & 1 & -3 & -1 & 5 & -3 \\ -2 & 0 & 2 & 1 & -3 & 0 & 3 & -2 \\ -2 & 0 & 1 & 1 & -2 & 0 & 2 & -1 \\ -1 & 0 & 0 & 1 & -1 & 0 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 2 & -1 & -2 & 1 & 1 & -1 & 0 & 0 \\ 2 & 0 & -3 & 1 & 2 & -2 & 0 & 0 \\ 3 & -1 & -4 & 1 & 3 & -2 & 0 & 0 \\ 4 & -1 & -6 & 2 & 4 & -3 & 0 & 0 \\ 3 & -1 & -4 & 1 & 4 & -3 & 0 & 0 \\ 2 & -1 & -3 & 1 & 3 & -3 & 1 & 0 \\ 2 & 0 & -2 & 0 & 2 & -2 & 1 & 0 \\ 1 & 0 & -1 & 0 & 1 & -1 & 0 & 1 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 1 & -1 & 0 & 2 & -2 & 1 \\ 0 & 0 & 1 & -1 & -1 & 3 & -3 & 2 \\ -1 & 1 & 2 & -2 & -1 & 4 & -4 & 2 \\ -1 & 1 & 3 & -3 & -1 & 5 & -6 & 4 \\ -1 & 1 & 2 & -2 & -1 & 4 & -5 & 3 \\ 0 & 1 & 1 & -2 & 0 & 3 & -4 & 2 \\ 0 & 0 & 1 & -1 & 0 & 2 & -3 & 1 \\ 0 & 0 & 1 & -1 & 0 & 1 & -1 & 0 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} -2 & 1 & 2 & -1 & -1 & 1 & 0 & 0 \\ -2 & 0 & 3 & -1 & -2 & 2 & 0 & 0 \\ -3 & 1 & 4 & -1 & -3 & 2 & 0 & 0 \\ -4 & 1 & 6 & -2 & -4 & 3 & 0 & 0 \\ -3 & 1 & 4 & -1 & -4 & 3 & 0 & 0 \\ -2 & 1 & 3 & -1 & -3 & 3 & -1 & 0 \\ -2 & 0 & 2 & 0 & -2 & 2 & -1 & 0 \\ -1 & 0 & 1 & 0 & -1 & 1 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & -1 & 1 & 0 & -2 & 2 & -1 \\ 0 & 0 & -1 & 1 & 1 & -3 & 3 & -2 \\ 1 & -1 & -2 & 2 & 1 & -4 & 4 & -2 \\ 1 & -1 & -3 & 3 & 1 & -5 & 6 & -4 \\ 1 & -1 & -2 & 2 & 1 & -4 & 5 & -3 \\ 0 & -1 & -1 & 2 & 0 & -3 & 4 & -2 \\ 0 & 0 & -1 & 1 & 0 & -2 & 3 & -1 \\ 0 & 0 & -1 & 1 & 0 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & -1 & -1 & 0 & 1 & 1 & -2 & 1 \\ 2 & 0 & -2 & 0 & 1 & 1 & -3 & 2 \\ 2 & 0 & -2 & -1 & 2 & 2 & -4 & 2 \\ 3 & 0 & -3 & -1 & 3 & 2 & -6 & 4 \\ 2 & 0 & -2 & -1 & 3 & 1 & -5 & 3 \\ 2 & 0 & -2 & -1 & 3 & 0 & -3 & 2 \\ 2 & 0 & -1 & -1 & 2 & 0 & -2 & 1 \\ 1 & 0 & 0 & -1 & 1 & 0 & -1 & 1 \end{pmatrix}, \\
\begin{pmatrix} 0 & 1 & 1 & -2 & 1 & 1 & -2 & 1 \\ 1 & 2 & 1 & -3 & 1 & 1 & -2 & 2 \\ 0 & 3 & 2 & -4 & 1 & 2 & -3 & 2 \\ 0 & 4 & 3 & -6 & 2 & 2 & -4 & 4 \\ 0 & 4 & 2 & -5 & 2 & 1 & -3 & 3 \\ 0 & 3 & 1 & -4 & 2 & 1 & -2 & 2 \\ 0 & 2 & 1 & -3 & 2 & 0 & -1 & 1 \\ 0 & 1 & 1 & -2 & 1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 1 & 1 & -2 & 0 & 1 & -1 \\ -1 & -1 & 2 & 1 & -2 & 0 & 1 & -2 \\ -1 & -1 & 2 & 2 & -3 & -1 & 2 & -2 \\ -1 & -1 & 3 & 2 & -4 & -1 & 3 & -4 \\ 0 & -1 & 2 & 2 & -4 & 0 & 2 & -3 \\ 0 & 0 & 2 & 1 & -3 & 0 & 1 & -2 \\ 0 & 0 & 1 & 1 & -2 & 0 & 0 & -1 \\ 0 & 0 & 0 & 1 & -1 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 1 & -1 & -2 & 1 & 1 & -1 & 1 & 0 \\ 0 & -1 & -3 & 2 & 1 & -1 & 1 & 0 \\ 1 & -2 & -4 & 2 & 2 & -1 & 1 & 0 \\ 1 & -3 & -6 & 4 & 2 & -1 & 1 & 0 \\ 0 & -3 & -4 & 3 & 2 & -1 & 1 & 0 \\ 0 & -3 & -3 & 3 & 1 & -1 & 1 & 0 \\ 0 & -2 & -2 & 2 & 0 & 0 & 1 & 0 \\ 0 & -1 & -1 & 1 & 0 & 0 & 0 & 1 \end{pmatrix}, \\
\begin{pmatrix} 1 & 0 & -1 & -1 & 2 & 0 & -1 & 1 \\ 1 & 1 & -2 & -1 & 2 & 0 & -1 & 2 \\ 1 & 1 & -2 & -2 & 3 & 1 & -2 & 2 \\ 1 & 1 & -3 & -2 & 4 & 1 & -3 & 4 \\ 0 & 1 & -2 & -2 & 4 & 0 & -2 & 3 \\ 0 & 0 & -2 & -1 & 3 & 0 & -1 & 2 \\ 0 & 0 & -1 & -1 & 2 & 0 & 0 & 1 \\ 0 & 0 & 0 & -1 & 1 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} -1 & 1 & 2 & -1 & -1 & 1 & -1 & 0 \\ 0 & 1 & 3 & -2 & -1 & 1 & -1 & 0 \\ -1 & 2 & 4 & -2 & -2 & 1 & -1 & 0 \\ -1 & 3 & 6 & -4 & -2 & 1 & -1 & 0 \\ 0 & 3 & 4 & -3 & -2 & 1 & -1 & 0 \\ 0 & 3 & 3 & -3 & -1 & 1 & -1 & 0 \\ 0 & 2 & 2 & -2 & 0 & 0 & -1 & 0 \\ 0 & 1 & 1 & -1 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & -1 & -1 & 2 & -1 & -1 & 2 & -1 \\ -1 & -2 & -1 & 3 & -1 & -1 & 2 & -2 \\ 0 & -3 & -2 & 4 & -1 & -2 & 3 & -2 \\ 0 & -4 & -3 & 6 & -2 & -2 & 4 & -4 \\ 0 & -4 & -2 & 5 & -2 & -1 & 3 & -3 \\ 0 & -3 & -1 & 4 & -2 & -1 & 2 & -2 \\ 0 & -2 & -1 & 3 & -2 & 0 & 1 & -1 \\ 0 & -1 & -1 & 2 & -1 & 0 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} -1 & 1 & 1 & -2 & 1 & 1 & -1 & 1 \\ -1 & 1 & 1 & -2 & 0 & 2 & -1 & 2 \\ -2 & 2 & 2 & -3 & 0 & 3 & -2 & 2 \\ -3 & 2 & 3 & -4 & 0 & 4 & -3 & 4 \\ -3 & 2 & 2 & -3 & 0 & 3 & -2 & 3 \\ -2 & 1 & 1 & -2 & 0 & 3 & -2 & 2 \\ -2 & 0 & 1 & -1 & 0 & 2 & -1 & 1 \\ -1 & 0 & 1 & -1 & 0 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 1 & 0 & -1 & -1 & 1 & -1 \\ 0 & 1 & 2 & -1 & 0 & -2 & 2 & -2 \\ 0 & 1 & 2 & 0 & -1 & -3 & 3 & -2 \\ 0 & 2 & 3 & -1 & -1 & -4 & 5 & -4 \\ 1 & 2 & 2 & -1 & -1 & -3 & 4 & -3 \\ 0 & 2 & 2 & -1 & -1 & -2 & 3 & -2 \\ 0 & 2 & 1 & -1 & 0 & -2 & 2 & -1 \\ 0 & 1 & 0 & 0 & 0 & -1 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 1 & -2 & -2 & 2 & 0 & 0 & 0 & 0 \\ 1 & -2 & -3 & 3 & 0 & 0 & -1 & 0 \\ 2 & -3 & -4 & 3 & 1 & 0 & -1 & 0 \\ 3 & -4 & -6 & 5 & 1 & 0 & -2 & 0 \\ 2 & -4 & -4 & 4 & 1 & 0 & -2 & 0 \\ 2 & -3 & -3 & 3 & 1 & -1 & -1 & 0 \\ 2 & -2 & -2 & 2 & 0 & 0 & -1 & 0 \\ 1 & -1 & -1 & 1 & 0 & 0 & -1 & 1 \end{pmatrix}, \\
\begin{pmatrix} 1 & 0 & -2 & 1 & -1 & 1 & 0 & 1 \\ 1 & 0 & -2 & 1 & -2 & 2 & 0 & 1 \\ 2 & 0 & -3 & 1 & -2 & 3 & -1 & 2 \\ 3 & 0 & -4 & 2 & -4 & 4 & -1 & 3 \\ 2 & -1 & -3 & 2 & -3 & 3 & -1 & 3 \\ 2 & -1 & -3 & 2 & -2 & 2 & -1 & 2 \\ 1 & -1 & -2 & 2 & -2 & 2 & -1 & 1 \\ 1 & -1 & -1 & 1 & -1 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 2 & -2 & 1 & 0 & 0 & 0 \\ 0 & 0 & 2 & -2 & 1 & 0 & 1 & -1 \\ -1 & 0 & 4 & -3 & 1 & 0 & 1 & -1 \\ -1 & -1 & 5 & -4 & 2 & 0 & 2 & -2 \\ -1 & 0 & 4 & -4 & 2 & 0 & 2 & -2 \\ -1 & 0 & 3 & -3 & 1 & 1 & 1 & -1 \\ -1 & 0 & 2 & -2 & 1 & 0 & 1 & 0 \\ -1 & 0 & 1 & -1 & 1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 0 & 1 & 0 & -1 & 0 & -1 \\ -1 & 0 & 0 & 1 & 1 & -2 & -1 & 0 \\ -1 & 0 & -1 & 2 & 1 & -3 & 0 & -1 \\ -2 & 1 & -1 & 2 & 2 & -4 & -1 & -1 \\ -1 & 1 & -1 & 2 & 1 & -3 & -1 & -1 \\ -1 & 1 & 0 & 1 & 1 & -3 & 0 & -1 \\ 0 & 1 & 0 & 0 & 1 & -2 & 0 & -1 \\ 0 & 1 & 0 & 0 & 0 & -1 & 0 & 0 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} 0 & 0 & -2 & 2 & -1 & 0 & 0 & 0 \\ 0 & 0 & -2 & 2 & -1 & 0 & -1 & 1 \\ 1 & 0 & -4 & 3 & -1 & 0 & -1 & 1 \\ 1 & 1 & -5 & 4 & -2 & 0 & -2 & 2 \\ 1 & 0 & -4 & 4 & -2 & 0 & -2 & 2 \\ 1 & 0 & -3 & 3 & -1 & -1 & -1 & 1 \\ 1 & 0 & -2 & 2 & -1 & 0 & -1 & 0 \\ 1 & 0 & -1 & 1 & -1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 0 & -1 & 0 & 1 & 0 & 1 \\ 1 & 0 & 0 & -1 & -1 & 2 & 1 & 0 \\ 1 & 0 & 1 & -2 & -1 & 3 & 0 & 1 \\ 2 & -1 & 1 & -2 & -2 & 4 & 1 & 1 \\ 1 & -1 & 1 & -2 & -1 & 3 & 1 & 1 \\ 1 & -1 & 0 & -1 & -1 & 3 & 0 & 1 \\ 0 & -1 & 0 & 0 & -1 & 2 & 0 & 1 \\ 0 & -1 & 0 & 0 & 0 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 2 & -1 & 1 & -1 & 0 & -1 \\ -1 & 0 & 2 & -1 & 2 & -2 & 0 & -1 \\ -2 & 0 & 3 & -1 & 2 & -3 & 1 & -2 \\ -3 & 0 & 4 & -2 & 4 & -4 & 1 & -3 \\ -2 & 1 & 3 & -2 & 3 & -3 & 1 & -3 \\ -2 & 1 & 3 & -2 & 2 & -2 & 1 & -2 \\ -1 & 1 & 2 & -2 & 2 & -2 & 1 & -1 \\ -1 & 1 & 1 & -1 & 1 & -1 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 0 & -1 & -1 & 2 & -1 & -1 & 1 & 1 \\ 0 & -2 & -1 & 3 & -1 & -2 & 2 & 0 \\ 0 & -2 & -1 & 3 & -1 & -3 & 3 & 1 \\ 0 & -3 & -2 & 5 & -2 & -4 & 5 & 0 \\ 1 & -2 & -2 & 4 & -2 & -3 & 4 & 0 \\ 0 & -1 & -1 & 3 & -2 & -2 & 3 & 0 \\ 0 & 0 & -1 & 2 & -1 & -2 & 2 & 0 \\ 0 & 0 & -1 & 1 & 0 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 0 & -2 & 2 & 0 & 0 & 0 \\ 1 & 0 & -1 & -2 & 3 & 0 & -1 & 1 \\ 2 & 0 & -1 & -3 & 4 & 0 & -1 & 0 \\ 3 & 0 & -2 & -4 & 6 & 0 & -2 & 1 \\ 2 & -1 & -1 & -3 & 5 & 0 & -2 & 1 \\ 2 & -1 & -1 & -2 & 4 & -1 & -1 & 1 \\ 2 & -1 & -1 & -1 & 2 & 0 & -1 & 1 \\ 1 & 0 & 0 & -1 & 1 & 0 & -1 & 1 \end{pmatrix}, \begin{pmatrix} -1 & 1 & 1 & 0 & -1 & 1 & -1 & -1 \\ -1 & 2 & 2 & -1 & -2 & 2 & -1 & -1 \\ -2 & 2 & 2 & 0 & -3 & 3 & -2 & -1 \\ -3 & 3 & 4 & -1 & -4 & 4 & -3 & -1 \\ -3 & 3 & 3 & -1 & -3 & 3 & -2 & -1 \\ -2 & 2 & 2 & -1 & -2 & 3 & -2 & -1 \\ -2 & 1 & 2 & -1 & -1 & 2 & -1 & -1 \\ -1 & 0 & 1 & 0 & -1 & 1 & 0 & -1 \end{pmatrix}, \\
\begin{pmatrix} -1 & 1 & 1 & -2 & 1 & 1 & -1 & 1 \\ -1 & 1 & 1 & -2 & 0 & 2 & -1 & 2 \\ -2 & 2 & 2 & -3 & 0 & 3 & -2 & 2 \\ -2 & 3 & 2 & -4 & 0 & 4 & -3 & 4 \\ -2 & 2 & 2 & -3 & 0 & 3 & -3 & 4 \\ -1 & 1 & 1 & -2 & 0 & 3 & -3 & 3 \\ -1 & 0 & 1 & -1 & 0 & 2 & -2 & 2 \\ 0 & 0 & 1 & -1 & 0 & 1 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 1 & 0 & -1 & -1 & 1 & -1 \\ 0 & 1 & 2 & -1 & 0 & -2 & 2 & -2 \\ 0 & 1 & 2 & 0 & -1 & -3 & 3 & -2 \\ 0 & 1 & 4 & -1 & -1 & -4 & 4 & -3 \\ 0 & 1 & 3 & -1 & -1 & -3 & 4 & -3 \\ -1 & 1 & 3 & -1 & -1 & -2 & 3 & -2 \\ -1 & 1 & 2 & -1 & 0 & -2 & 2 & -1 \\ -1 & 0 & 1 & 0 & 0 & -1 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 1 & -2 & -2 & 2 & 0 & 0 & 0 & 0 \\ 1 & -2 & -3 & 3 & 0 & 0 & -1 & 0 \\ 2 & -3 & -4 & 3 & 1 & 0 & -1 & 0 \\ 2 & -4 & -6 & 5 & 1 & 0 & -1 & -1 \\ 2 & -3 & -5 & 4 & 1 & 0 & -1 & -1 \\ 2 & -2 & -4 & 3 & 1 & -1 & 0 & -1 \\ 2 & -1 & -3 & 2 & 0 & 0 & 0 & -1 \\ 1 & 0 & -2 & 1 & 0 & 0 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 1 & 2 & -2 & 0 & 0 & 0 & 0 & 0 \\ 2 & 2 & -3 & 0 & 0 & 0 & 1 & -1 \\ 3 & 3 & -4 & 0 & 0 & 0 & 0 & 0 \\ 4 & 4 & -6 & 1 & -1 & 0 & 1 & -1 \\ 3 & 3 & -5 & 1 & -1 & 0 & 1 & 0 \\ 2 & 2 & -4 & 1 & 0 & -1 & 1 & 0 \\ 1 & 1 & -3 & 1 & 0 & 0 & 0 & 0 \\ 1 & 0 & -2 & 1 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & -1 & 1 & 0 & -1 & 1 & -1 & 1 \\ 1 & -1 & 1 & 0 & -1 & 2 & -2 & 1 \\ 1 & -2 & 2 & 0 & -2 & 3 & -2 & 1 \\ 2 & -3 & 2 & 0 & -2 & 4 & -3 & 2 \\ 2 & -2 & 2 & -1 & -1 & 3 & -2 & 1 \\ 2 & -1 & 1 & -1 & -1 & 3 & -2 & 1 \\ 1 & 0 & 1 & -1 & -1 & 2 & -1 & 1 \\ 0 & 0 & 1 & -1 & 0 & 1 & -1 & 1 \end{pmatrix}, \begin{pmatrix} -2 & -1 & 1 & 0 & 1 & -1 & 1 & -1 \\ -3 & -1 & 2 & 0 & 1 & -2 & 1 & 0 \\ -4 & -1 & 2 & 0 & 2 & -3 & 2 & -1 \\ -6 & -1 & 4 & -1 & 3 & -4 & 2 & -1 \\ -5 & -1 & 3 & 0 & 2 & -3 & 1 & -1 \\ -4 & -1 & 3 & 0 & 1 & -2 & 1 & -1 \\ -2 & -1 & 2 & 0 & 1 & -2 & 1 & -1 \\ -1 & 0 & 1 & 0 & 0 & -1 & 1 & -1 \end{pmatrix}, \\
\begin{pmatrix} -1 & 1 & -1 & 0 & 1 & -1 & 1 & -1 \\ -1 & 1 & -1 & 0 & 1 & -2 & 2 & -1 \\ -1 & 2 & -2 & 0 & 2 & -3 & 2 & -1 \\ -2 & 3 & -2 & 0 & 2 & -4 & 3 & -2 \\ -2 & 2 & -2 & 1 & 1 & -3 & 2 & -1 \\ -2 & 1 & -1 & 1 & 1 & -3 & 2 & -1 \\ -1 & 0 & -1 & 1 & 1 & -2 & 1 & -1 \\ 0 & 0 & -1 & 1 & 0 & -1 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 2 & 1 & -1 & 0 & -1 & 1 & -1 & 1 \\ 3 & 1 & -2 & 0 & -1 & 2 & -1 & 0 \\ 4 & 1 & -2 & 0 & -2 & 3 & -2 & 1 \\ 6 & 1 & -4 & 1 & -3 & 4 & -2 & 1 \\ 5 & 1 & -3 & 0 & -2 & 3 & -1 & 1 \\ 4 & 1 & -3 & 0 & -1 & 2 & -1 & 1 \\ 2 & 1 & -2 & 0 & -1 & 2 & -1 & 1 \\ 1 & 0 & -1 & 0 & 0 & 1 & -1 & 1 \end{pmatrix}, \begin{pmatrix} -1 & -2 & 2 & 0 & 0 & 0 & 0 & 0 \\ -2 & -2 & 3 & 0 & 0 & 0 & -1 & 1 \\ -3 & -3 & 4 & 0 & 0 & 0 & 0 & 0 \\ -4 & -4 & 6 & -1 & 1 & 0 & -1 & 1 \\ -3 & -3 & 5 & -1 & 1 & 0 & -1 & 0 \\ -2 & -2 & 4 & -1 & 0 & 1 & -1 & 0 \\ -1 & -1 & 3 & -1 & 0 & 0 & 0 & 0 \\ -1 & 0 & 2 & -1 & 0 & 0 & 0 & 0 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} -1 & 1 & 2 & -2 & 1 & 0 & 0 & -1 \\ -2 & 2 & 3 & -3 & 1 & 0 & 0 & 0 \\ -3 & 2 & 4 & -3 & 1 & 0 & 0 & -1 \\ -4 & 3 & 6 & -5 & 2 & 0 & -1 & 0 \\ -4 & 2 & 5 & -4 & 2 & 0 & -1 & 0 \\ -3 & 1 & 4 & -3 & 1 & 1 & -1 & 0 \\ -2 & 0 & 3 & -2 & 1 & 0 & 0 & 0 \\ -1 & 0 & 2 & -1 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 & -1 & 2 & -1 & -1 & 0 & 0 \\ 1 & 0 & -1 & 2 & -1 & -2 & 1 & -1 \\ 1 & 0 & -2 & 3 & -1 & -3 & 1 & 0 \\ 1 & 0 & -2 & 4 & -2 & -4 & 2 & -1 \\ 1 & 1 & -2 & 3 & -2 & -3 & 2 & -1 \\ 0 & 1 & -1 & 2 & -1 & -3 & 2 & -1 \\ 0 & 1 & -1 & 1 & 0 & -2 & 1 & -1 \\ 0 & 0 & -1 & 1 & 0 & -1 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 1 & -1 & -1 & 0 & 0 & 1 & 0 & 1 \\ 1 & -2 & -2 & 1 & 0 & 2 & -1 & 1 \\ 2 & -2 & -2 & 0 & 0 & 3 & -1 & 1 \\ 3 & -3 & -4 & 1 & 0 & 4 & -1 & 1 \\ 3 & -3 & -3 & 1 & 0 & 3 & -1 & 1 \\ 3 & -2 & -3 & 1 & 0 & 2 & -1 & 1 \\ 2 & -1 & -2 & 1 & -1 & 2 & -1 & 1 \\ 1 & 0 & -1 & 0 & 0 & 1 & -1 & 1 \end{pmatrix}, \\
\begin{pmatrix} 0 & 0 & 1 & -2 & 1 & 1 & 0 & 0 \\ -1 & 0 & 1 & -2 & 1 & 2 & -1 & 1 \\ -1 & 0 & 2 & -3 & 1 & 3 & -1 & 0 \\ -1 & 0 & 2 & -4 & 2 & 4 & -2 & 1 \\ -1 & -1 & 2 & -3 & 2 & 3 & -2 & 1 \\ 0 & -1 & 1 & -2 & 1 & 3 & -2 & 1 \\ 0 & -1 & 1 & -1 & 0 & 2 & -1 & 1 \\ 0 & 0 & 1 & -1 & 0 & 1 & -1 & 1 \end{pmatrix}, \begin{pmatrix} -1 & 1 & 1 & 0 & 0 & -1 & 0 & -1 \\ -1 & 2 & 2 & -1 & 0 & -2 & 1 & -1 \\ -2 & 2 & 2 & 0 & 0 & -3 & 1 & -1 \\ -3 & 3 & 4 & -1 & 0 & -4 & 1 & -1 \\ -3 & 3 & 3 & -1 & 0 & -3 & 1 & -1 \\ -3 & 2 & 3 & -1 & 0 & -2 & 1 & -1 \\ -2 & 1 & 2 & -1 & 1 & -2 & 1 & -1 \\ -1 & 0 & 1 & 0 & 0 & -1 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 1 & -1 & -2 & 2 & -1 & 0 & 0 & 1 \\ 2 & -2 & -3 & 3 & -1 & 0 & 0 & 0 \\ 3 & -2 & -4 & 3 & -1 & 0 & 0 & 1 \\ 4 & -3 & -6 & 5 & -2 & 0 & 1 & 0 \\ 4 & -2 & -5 & 4 & -2 & 0 & 1 & 0 \\ 3 & -1 & -4 & 3 & -1 & -1 & 1 & 0 \\ 2 & 0 & -3 & 2 & -1 & 0 & 0 & 0 \\ 1 & 0 & -2 & 1 & 0 & 0 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} -2 & 1 & 0 & 0 & 0 & 0 & 1 & -1 \\ -3 & 1 & 1 & 0 & -1 & 0 & 2 & -1 \\ -4 & 2 & 1 & 0 & -1 & 0 & 2 & -1 \\ -6 & 3 & 2 & 0 & -2 & 0 & 3 & -2 \\ -5 & 2 & 1 & 1 & -2 & 0 & 2 & -1 \\ -4 & 1 & 1 & 1 & -2 & 1 & 1 & -1 \\ -3 & 0 & 1 & 1 & -1 & 0 & 1 & -1 \\ -1 & 0 & 0 & 1 & -1 & 0 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 2 & 1 & -1 & 0 & 0 & -1 & 0 & 1 \\ 3 & 1 & -2 & 0 & 1 & -2 & 1 & 0 \\ 4 & 1 & -2 & 0 & 1 & -3 & 1 & 1 \\ 6 & 1 & -4 & 1 & 1 & -4 & 2 & 1 \\ 5 & 1 & -3 & 0 & 1 & -3 & 2 & 1 \\ 3 & 1 & -2 & 0 & 1 & -3 & 2 & 1 \\ 2 & 1 & -2 & 0 & 1 & -2 & 1 & 1 \\ 1 & 0 & -1 & 0 & 1 & -1 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & -2 & 1 & 0 & 0 & 1 & -1 & 0 \\ 0 & -2 & 1 & 0 & 0 & 2 & -3 & 1 \\ 0 & -3 & 1 & 0 & 0 & 3 & -3 & 0 \\ 0 & -4 & 2 & -1 & 1 & 4 & -5 & 1 \\ 0 & -3 & 2 & -1 & 1 & 3 & -4 & 0 \\ 1 & -2 & 1 & -1 & 1 & 2 & -3 & 0 \\ 1 & -1 & 1 & -1 & 0 & 2 & -2 & 0 \\ 0 & 0 & 1 & -1 & 0 & 1 & -1 & 0 \end{pmatrix}, \\
\begin{pmatrix} -2 & -1 & 1 & 0 & 0 & 1 & 0 & -1 \\ -3 & -1 & 2 & 0 & -1 & 2 & -1 & 0 \\ -4 & -1 & 2 & 0 & -1 & 3 & -1 & -1 \\ -6 & -1 & 4 & -1 & -1 & 4 & -2 & -1 \\ -5 & -1 & 3 & 0 & -1 & 3 & -2 & -1 \\ -3 & -1 & 2 & 0 & -1 & 3 & -2 & -1 \\ -2 & -1 & 2 & 0 & -1 & 2 & -1 & -1 \\ -1 & 0 & 1 & 0 & -1 & 1 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 2 & -1 & 0 & 0 & -1 & 1 & 0 \\ 0 & 2 & -1 & 0 & 0 & -2 & 3 & -1 \\ 0 & 3 & -1 & 0 & 0 & -3 & 3 & 0 \\ 0 & 4 & -2 & 1 & -1 & -4 & 5 & -1 \\ 0 & 3 & -2 & 1 & -1 & -3 & 4 & 0 \\ -1 & 2 & -1 & 1 & -1 & -2 & 3 & 0 \\ -1 & 1 & -1 & 1 & 0 & -2 & 2 & 0 \\ 0 & 0 & -1 & 1 & 0 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 2 & -1 & 0 & 0 & 0 & 0 & -1 & 1 \\ 3 & -1 & -1 & 0 & 1 & 0 & -2 & 1 \\ 4 & -2 & -1 & 0 & 1 & 0 & -2 & 1 \\ 6 & -3 & -2 & 0 & 2 & 0 & -3 & 2 \\ 5 & -2 & -1 & -1 & 2 & 0 & -2 & 1 \\ 4 & -1 & -1 & -1 & 2 & -1 & -1 & 1 \\ 3 & 0 & -1 & -1 & 1 & 0 & -1 & 1 \\ 1 & 0 & 0 & -1 & 1 & 0 & -1 & 1 \end{pmatrix}, \\
\begin{pmatrix} -2 & 0 & 1 & 0 & 0 & 1 & -1 & 0 \\ -2 & -1 & 1 & 0 & 1 & 1 & -2 & 1 \\ -3 & 0 & 1 & 0 & 1 & 1 & -2 & 1 \\ -4 & -1 & 2 & 0 & 1 & 2 & -3 & 2 \\ -3 & -1 & 2 & 0 & 1 & 1 & -2 & 1 \\ -2 & -1 & 1 & 0 & 1 & 1 & -1 & 0 \\ -1 & 0 & 1 & -1 & 1 & 1 & -1 & 0 \\ -1 & 0 & 1 & -1 & 1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 0 & 0 & 0 & -2 & 1 & 1 \\ -1 & 2 & 1 & -1 & 0 & -2 & 1 & 1 \\ 0 & 2 & 1 & -1 & 0 & -3 & 1 & 2 \\ -1 & 3 & 2 & -2 & 1 & -5 & 2 & 2 \\ -1 & 2 & 1 & -1 & 1 & -4 & 1 & 2 \\ -1 & 2 & 1 & -1 & 1 & -3 & 0 & 2 \\ -1 & 1 & 1 & 0 & 0 & -2 & 0 & 1 \\ 0 & 1 & 0 & 0 & 0 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 2 & -1 & -1 & 0 & 0 & 1 & 0 & -1 \\ 3 & -1 & -2 & 1 & -1 & 1 & 1 & -2 \\ 3 & -2 & -2 & 1 & -1 & 2 & 1 & -3 \\ 5 & -2 & -4 & 2 & -2 & 3 & 1 & -4 \\ 4 & -1 & -3 & 1 & -2 & 3 & 1 & -3 \\ 3 & -1 & -2 & 1 & -2 & 2 & 1 & -2 \\ 2 & -1 & -2 & 1 & -1 & 1 & 1 & -1 \\ 1 & -1 & -1 & 1 & -1 & 1 & 0 & 0 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} 0 & -1 & 0 & 0 & 0 & 2 & -1 & -1 \\ 1 & -2 & -1 & 1 & 0 & 2 & -1 & -1 \\ 0 & -2 & -1 & 1 & 0 & 3 & -1 & -2 \\ 1 & -3 & -2 & 2 & -1 & 5 & -2 & -2 \\ 1 & -2 & -1 & 1 & -1 & 4 & -1 & -2 \\ 1 & -2 & -1 & 1 & -1 & 3 & 0 & -2 \\ 1 & -1 & -1 & 0 & 0 & 2 & 0 & -1 \\ 0 & -1 & 0 & 0 & 0 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -2 & 1 & 1 & 0 & 0 & -1 & 0 & 1 \\ -3 & 1 & 2 & -1 & 1 & -1 & -1 & 2 \\ -3 & 2 & 2 & -1 & 1 & -2 & -1 & 3 \\ -5 & 2 & 4 & -2 & 2 & -3 & -1 & 4 \\ -4 & 1 & 3 & -1 & 2 & -3 & -1 & 3 \\ -3 & 1 & 2 & -1 & 2 & -2 & -1 & 2 \\ -2 & 1 & 2 & -1 & 1 & -1 & -1 & 1 \\ -1 & 1 & 1 & -1 & 1 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 2 & 0 & -1 & 0 & 0 & -1 & 1 & 0 \\ 2 & 1 & -1 & 0 & -1 & -1 & 2 & -1 \\ 3 & 0 & -1 & 0 & -1 & -1 & 2 & -1 \\ 4 & 1 & -2 & 0 & -1 & -2 & 3 & -2 \\ 3 & 1 & -2 & 0 & -1 & -1 & 2 & -1 \\ 2 & 1 & -1 & 0 & -1 & -1 & 1 & 0 \\ 1 & 0 & -1 & 1 & -1 & -1 & 1 & 0 \\ 1 & 0 & -1 & 1 & -1 & 0 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 1 & -1 & -1 & 2 & -1 & -1 & 1 & -1 \\ 1 & -1 & -1 & 2 & -1 & -2 & 2 & -1 \\ 1 & -2 & -2 & 4 & -2 & -2 & 2 & -1 \\ 1 & -3 & -2 & 5 & -2 & -4 & 4 & -2 \\ 1 & -2 & -2 & 4 & -1 & -4 & 3 & -1 \\ 0 & -1 & -1 & 3 & -1 & -3 & 2 & -1 \\ 0 & 0 & -1 & 2 & -1 & -2 & 2 & -1 \\ 0 & 0 & -1 & 1 & 0 & -1 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 0 & -1 & -1 & 0 & 1 & 1 & -1 & 1 \\ 1 & -1 & -2 & 0 & 1 & 2 & -1 & 0 \\ 1 & -1 & -2 & -1 & 2 & 2 & -1 & 1 \\ 2 & -1 & -4 & -1 & 3 & 3 & -2 & 1 \\ 2 & -1 & -3 & -1 & 2 & 3 & -2 & 1 \\ 2 & -1 & -3 & 0 & 1 & 2 & -1 & 1 \\ 2 & -1 & -2 & 0 & 1 & 1 & -1 & 1 \\ 1 & 0 & -1 & 0 & 0 & 1 & -1 & 1 \end{pmatrix}, \begin{pmatrix} -1 & 2 & 2 & -2 & 0 & 0 & 0 & 0 \\ -2 & 2 & 3 & -2 & 0 & 0 & -1 & 1 \\ -2 & 3 & 4 & -3 & 0 & 0 & -1 & 0 \\ -3 & 4 & 6 & -4 & -1 & 1 & -2 & 1 \\ -3 & 3 & 5 & -3 & -1 & 1 & -1 & 0 \\ -2 & 2 & 4 & -3 & 0 & 1 & -1 & 0 \\ -2 & 1 & 3 & -2 & 0 & 1 & -1 & 0 \\ -1 & 0 & 2 & -1 & 0 & 0 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} -1 & 1 & 1 & 0 & -1 & 1 & -1 & -1 \\ -2 & 2 & 2 & -1 & 0 & 0 & -1 & -1 \\ -3 & 2 & 2 & 0 & -1 & 1 & -2 & -1 \\ -5 & 3 & 4 & -1 & -1 & 1 & -2 & -2 \\ -4 & 3 & 3 & -1 & -1 & 1 & -1 & -2 \\ -3 & 2 & 2 & -1 & 0 & 1 & -1 & -2 \\ -2 & 2 & 1 & -1 & 0 & 1 & -1 & -1 \\ -1 & 1 & 0 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & -1 & -1 & 2 & -1 & -1 & 1 & 1 \\ 1 & -1 & -2 & 3 & -2 & -1 & 1 & 1 \\ 1 & -1 & -2 & 3 & -2 & -2 & 2 & 2 \\ 2 & -1 & -4 & 5 & -3 & -3 & 3 & 2 \\ 2 & -1 & -3 & 4 & -2 & -3 & 2 & 2 \\ 1 & 0 & -2 & 3 & -2 & -2 & 1 & 2 \\ 1 & 0 & -1 & 2 & -2 & -1 & 1 & 1 \\ 1 & 0 & -1 & 1 & -1 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 0 & -2 & 2 & 0 & 0 & 0 \\ 1 & -1 & 0 & -2 & 2 & 1 & 0 & 0 \\ 2 & -1 & 0 & -3 & 3 & 1 & 0 & -1 \\ 3 & -2 & 0 & -4 & 4 & 2 & -1 & 0 \\ 2 & -2 & 0 & -3 & 3 & 2 & -1 & 0 \\ 2 & -2 & 0 & -2 & 2 & 1 & 0 & 0 \\ 1 & -2 & 0 & -1 & 2 & 0 & 0 & 0 \\ 0 & -1 & 1 & -1 & 1 & 0 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} -1 & -1 & 0 & 0 & 1 & 0 & 0 & 1 \\ -1 & -2 & 1 & 0 & 1 & 0 & 0 & 1 \\ -1 & -2 & 1 & -1 & 2 & 0 & 0 & 2 \\ -2 & -3 & 2 & -1 & 2 & 0 & 1 & 2 \\ -1 & -2 & 1 & -1 & 2 & 0 & 1 & 1 \\ 0 & -2 & 0 & 0 & 1 & 0 & 1 & 1 \\ 0 & -2 & 0 & 0 & 1 & 0 & 1 & 0 \\ 0 & -1 & 0 & 0 & 1 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 2 & 1 & -2 & 1 & -1 & 0 & 0 \\ -1 & 2 & 1 & -2 & 2 & -2 & 0 & 0 \\ -1 & 3 & 2 & -3 & 2 & -2 & 0 & -1 \\ -1 & 4 & 2 & -4 & 4 & -4 & 0 & -1 \\ -1 & 3 & 2 & -3 & 3 & -3 & -1 & 0 \\ -1 & 2 & 2 & -3 & 3 & -2 & -1 & 0 \\ -1 & 2 & 1 & -2 & 2 & -1 & -1 & 0 \\ 0 & 1 & 0 & -1 & 1 & 0 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & -1 & -1 & 2 & -2 & 1 & 0 & -1 \\ 2 & 0 & -2 & 2 & -3 & 2 & 0 & -1 \\ 2 & -1 & -3 & 4 & -4 & 2 & 0 & -1 \\ 3 & -1 & -4 & 5 & -6 & 4 & -1 & -1 \\ 2 & -1 & -3 & 4 & -5 & 3 & 0 & -1 \\ 1 & 0 & -2 & 3 & -4 & 2 & 0 & -1 \\ 1 & 0 & -1 & 2 & -3 & 1 & 0 & 0 \\ 0 & 0 & 0 & 1 & -2 & 1 & 0 & 0 \end{pmatrix}.$$

The character table of G^{s8} :

	10																20							
$\chi_8^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_8^{(2)}$	1	A	/A	A	/A	1	A	/A	1	A	/A	1	1	A	/A	1	A	/A	/A	1	A	1	A	/A
$\chi_8^{(3)}$	1	/A	A	/A	A	1	/A	A	1	/A	A	1	1	/A	A	1	/A	A	A	1	/A	1	/A	A
$\chi_8^{(4)}$	4	4	4	-4	-4	-4	.	.	.	.	.	.	.	.	.	.	.	-2	-2	-2	2	2	2	2
$\chi_8^{(5)}$	4	4	4	-4	-4	-4	.	.	.	.	.	.	.	.	.	.	.	-2	-2	-2	2	2	2	2
$\chi_8^{(6)}$	4	B	/B	-B	-/B	-4	.	.	.	.	.	.	.	.	.	.	.	-/Q	-2	-Q	2	Q	/Q	/Q
$\chi_8^{(7)}$	4	/B	B	-/B	-B	-4	.	.	.	.	.	.	.	.	.	.	.	-Q	-2	-/Q	2	/Q	Q	Q
$\chi_8^{(8)}$	4	B	/B	-B	-/B	-4	.	.	.	.	.	.	.	.	.	.	.	-/Q	-2	-Q	2	Q	/Q	/Q
$\chi_8^{(9)}$	4	/B	B	-/B	-B	-4	.	.	.	.	.	.	.	.	.	.	.	-Q	-2	-/Q	2	/Q	Q	Q
$\chi_8^{(10)}$	5	5	5	5	5	5	-1	-1	-1	1	1	1	-3	-3	-3	1	1	1	-1	-1	-1	-1	-1	-1
$\chi_8^{(11)}$	5	5	5	5	5	5	-1	-1	-1	1	1	1	-3	-3	-3	1	1	1	-1	-1	-1	-1	-1	-1
$\chi_8^{(12)}$	5	C	/C	C	/C	5	-A	-/A	-1	A	/A	1	-3	-R	-/R	1	A	/A	-/A	-1	-A	-1	-A	-/A
$\chi_8^{(13)}$	5	/C	C	/C	C	5	-/A	-A	-1	/A	A	1	-3	-/R	-R	1	/A	A	-A	-1	-/A	-1	-/A	-A
$\chi_8^{(14)}$	5	C	/C	C	/C	5	-A	-/A	-1	A	/A	1	-3	-R	-/R	1	A	/A	-/A	-1	-A	-1	-A	-/A
$\chi_8^{(15)}$	5	/C	C	/C	C	5	-/A	-A	-1	/A	A	1	-3	-/R	-R	1	/A	A	-A	-1	-/A	-1	-/A	-A
$\chi_8^{(16)}$	6	6	6	6	6	6	.	.	.	2	2	2	-2	-2	-2	-1	-1	-1	3	3	3	3	3	3
$\chi_8^{(17)}$	6	D	/D	D	/D	6	.	.	.	Q	/Q	2	-2	-Q	-/Q	-1	-A	-/A	/R	3	R	3	R	/R
$\chi_8^{(18)}$	6	/D	D	/D	D	6	.	.	.	/Q	Q	2	-2	-/Q	-Q	-1	-/A	-A	R	3	/R	3	/R	R
$\chi_8^{(19)}$	10	10	10	10	10	10	.	.	.	-2	-2	-2	2	2	2	1	1	1	1	1	1	1	1	1
$\chi_8^{(20)}$	10	10	10	10	10	10	.	.	.	-2	-2	-2	2	2	2	1	1	1	1	1	1	1	1	1
$\chi_8^{(21)}$	10	E	/E	E	/E	10	.	.	.	-Q	-/Q	-2	2	Q	/Q	1	A	/A	/A	1	A	1	A	/A
$\chi_8^{(22)}$	10	/E	E	/E	E	10	.	.	.	-/Q	-Q	-2	2	/Q	Q	1	/A	A	A	1	/A	1	/A	A
$\chi_8^{(23)}$	10	E	/E	E	/E	10	.	.	.	-Q	-/Q	-2	2	Q	/Q	1	A	/A	/A	1	A	1	A	/A
$\chi_8^{(24)}$	10	/E	E	/E	E	10	.	.	.	-/Q	-Q	-2	2	/Q	Q	1	/A	A	A	1	/A	1	/A	A
$\chi_8^{(25)}$	15	15	15	15	15	15	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	3	3	3	3	3	3
$\chi_8^{(26)}$	15	15	15	15	15	15	1	1	1	3	3	3	7	7	7	.	.	.	.	.	.	.	.	.
$\chi_8^{(27)}$	15	F	/F	F	/F	15	-A	-/A	-1	-A	-/A	-1	-1	-A	-/A	-1	-A	-/A	/R	3	R	3	R	/R
$\chi_8^{(28)}$	15	/F	F	/F	F	15	-/A	-A	-1	-/A	-A	-1	-1	-/A	-A	-1	-/A	-A	R	3	/R	3	/R	R
$\chi_8^{(29)}$	15	F	/F	F	/F	15	A	/A	1	R	/R	3	7	S	/S	.	.	.	.	.	.	.	.	.
$\chi_8^{(30)}$	15	/F	F	/F	F	15	/A	A	1	/R	R	3	7	/S	S	.	.	.	.	.	.	.	.	.
$\chi_8^{(31)}$	20	20	20	-20	-20	-20	.	.	.	.	.	.	.	.	.	.	.	.	2	2	2	-2	-2	-2
$\chi_8^{(32)}$	20	20	20	20	20	20	.	.	.	4	4	4	4	4	4	1	1	1	5	5	5	5	5	5
$\chi_8^{(33)}$	20	20	20	-20	-20	-20	.	.	.	.	.	.	.	.	.	.	.	.	2	2	2	-2	-2	-2
$\chi_8^{(34)}$	20	20	20	-20	-20	-20	.	.	.	.	.	.	.	.	.	.	.	.	2	2	2	-2	-2	-2
$\chi_8^{(35)}$	20	20	20	-20	-20	-20	.	.	.	.	.	.	.	.	.	.	.	.	-4	-4	-4	4	4	4
$\chi_8^{(36)}$	20	20	20	-20	-20	-20	.	.	.	.	.	.	.	.	.	.	.	.	-4	-4	-4	4	4	4
$\chi_8^{(37)}$	20	G	/G	-G	-/G	-20	.	.	.	.	.	.	.	.	.	.	.	.	/Q	2	Q	-2	-Q	-/Q
$\chi_8^{(38)}$	20	/G	G	-/G	-G	-20	.	.	.	.	.	.	.	.	.	.	.	.	Q	2	/Q	-2	-/Q	-Q
$\chi_8^{(39)}$	20	G	/G	-G	-/G	-20	.	.	.	.	.	.	.	.	.	.	.	.	-/B	-4	-B	4	B	/B
$\chi_8^{(40)}$	20	/G	G	-/G	-G	-20	.	.	.	.	.	.	.	.	.	.	.	.	-B	-4	-/B	4	/B	B
$\chi_8^{(41)}$	20	G	/G	-G	-/G	-20	.	.	.	.	.	.	.	.	.	.	.	.	/Q	2	Q	-2	-Q	-/Q
$\chi_8^{(42)}$	20	/G	G	-/G	-G	-20	.	.	.	.	.	.	.	.	.	.	.	.	Q	2	/Q	-2	-/Q	-Q
$\chi_8^{(43)}$	20	G	/G	-G	-/G	-20	.	.	.	.	.	.	.	.	.	.	.	.	/Q	2	Q	-2	-Q	-/Q
$\chi_8^{(44)}$	20	/G	G	-/G	-G	-20	.	.	.	.	.	.	.	.	.	.	.	.	Q	2	/Q	-2	-/Q	-Q
$\chi_8^{(45)}$	20	G	/G	-G	-/G	-20	.	.	.	.	.	.	.	.	.	.	.	.	-/B	-4	-B	4	B	/B

	10																20							
$\chi_8^{(46)}$	20	/G	G	-/G	-G	-20	.	.	.	.	.	.	.	.	.	.	.	-B	-4	-/B	4	/B	B	
$\chi_8^{(47)}$	20	G	/G	G	/G	20	.	.	.	B	/B	4	4	B	/B	1	A	/A	/C	5	C	5	C	/C
$\chi_8^{(48)}$	20	/G	G	/G	G	20	.	.	.	/B	B	4	4	/B	B	1	/A	A	C	5	/C	5	/C	C
$\chi_8^{(49)}$	24	24	24	24	24	24	.	.	.	.	.	8	8	8	8	.	.	.	.	.	.	.	.	.
$\chi_8^{(50)}$	24	H	/H	H	/H	24	.	.	.	.	.	8	T	/T	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(51)}$	24	/H	H	/H	H	24	.	.	.	.	.	8	/T	T	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(52)}$	30	30	30	30	30	30	.	.	.	2	2	2	-10	-10	-10	-1	-1	-1	3	3	3	3	3	3
$\chi_8^{(53)}$	30	30	30	30	30	30	.	.	.	2	2	2	6	6	6	-1	-1	-1	-3	-3	-3	-3	-3	-3
$\chi_8^{(54)}$	30	30	30	30	30	30	.	.	.	2	2	2	6	6	6	-1	-1	-1	-3	-3	-3	-3	-3	-3
$\chi_8^{(55)}$	30	I	/I	I	/I	30	.	.	.	Q	/Q	2	6	D	/D	-1	-A	-/A	-/R	-3	-R	-3	-R	-/R
$\chi_8^{(56)}$	30	/I	I	/I	I	30	.	.	.	/Q	Q	2	6	/D	D	-1	-/A	-A	-R	-3	-/R	-3	-/R	-R
$\chi_8^{(57)}$	30	I	/I	I	/I	30	.	.	.	Q	/Q	2	6	D	/D	-1	-A	-/A	-/R	-3	-R	-3	-R	-/R
$\chi_8^{(58)}$	30	/I	I	/I	I	30	.	.	.	/Q	Q	2	6	/D	D	-1	-/A	-A	-R	-3	-/R	-3	-/R	-R
$\chi_8^{(59)}$	30	I	/I	I	/I	30	.	.	.	Q	/Q	2	-10	-E	-/E	-1	-A	-/A	/R	3	R	3	R	/R
$\chi_8^{(60)}$	30	/I	I	/I	I	30	.	.	.	/Q	Q	2	-10	-/E	-E	-1	-/A	-A	R	3	/R	3	/R	R
$\chi_8^{(61)}$	36	36	36	-36	-36	-36	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(62)}$	36	36	36	-36	-36	-36	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(63)}$	36	J	/J	-J	-/J	-36	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(64)}$	36	/J	J	-/J	-J	-36	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(65)}$	36	J	/J	-J	-/J	-36	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(66)}$	36	/J	J	-/J	-J	-36	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(67)}$	40	40	40	40	40	40	.	.	.	.	.	-8	-8	-8	.	.	.	-2	-2	-2	-2	-2	-2	-2
$\chi_8^{(68)}$	40	40	40	40	40	40	.	.	.	.	.	-8	-8	-8	.	.	.	-2	-2	-2	-2	-2	-2	-2
$\chi_8^{(69)}$	40	K	/K	K	/K	40	.	.	.	.	.	-8	-T	-/T	.	.	.	-/Q	-2	-Q	-2	-Q	-/Q	-/Q
$\chi_8^{(70)}$	40	/K	K	/K	K	40	.	.	.	.	.	-8	-/T	-T	.	.	.	-Q	-2	-/Q	-2	-/Q	-Q	-Q
$\chi_8^{(71)}$	40	K	/K	K	/K	40	.	.	.	.	.	-8	-T	-/T	.	.	.	-/Q	-2	-Q	-2	-Q	-/Q	-/Q
$\chi_8^{(72)}$	40	/K	K	/K	K	40	.	.	.	.	.	-8	-/T	-T	.	.	.	-Q	-2	-/Q	-2	-/Q	-Q	-Q
$\chi_8^{(73)}$	45	45	45	45	45	45	1	1	1	-3	-3	-3	-3	-3	-3	.	.	.	.	.	.	.	.	.
$\chi_8^{(74)}$	45	45	45	45	45	45	1	1	1	-3	-3	-3	-3	-3	-3	.	.	.	.	.	.	.	.	.
$\chi_8^{(75)}$	45	L	/L	L	/L	45	A	/A	1	-R	-/R	-3	-3	-R	-/R	.	.	.	.	.	.	.	.	.
$\chi_8^{(76)}$	45	/L	L	/L	L	45	/A	A	1	-/R	-R	-3	-3	-/R	-R	.	.	.	.	.	.	.	.	.
$\chi_8^{(77)}$	45	L	/L	L	/L	45	A	/A	1	-R	-/R	-3	-3	-R	-/R	.	.	.	.	.	.	.	.	.
$\chi_8^{(78)}$	45	/L	L	/L	L	45	/A	A	1	-/R	-R	-3	-3	-/R	-R	.	.	.	.	.	.	.	.	.
$\chi_8^{(79)}$	60	60	60	-60	-60	-60	.	.	.	.	.	.	.	.	.	.	.	-6	-6	-6	6	6	6	6
$\chi_8^{(80)}$	60	60	60	60	60	60	.	.	.	4	4	4	-4	-4	-4	1	1	1	-3	-3	-3	-3	-3	-3
$\chi_8^{(81)}$	60	60	60	-60	-60	-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(82)}$	60	60	60	-60	-60	-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(83)}$	60	M	/M	-M	-/M	-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(84)}$	60	/M	M	-/M	-M	-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(85)}$	60	M	/M	-M	-/M	-60	.	.	.	.	.	.	.	.	.	.	.	-/D	-6	-D	6	D	/D	/D
$\chi_8^{(86)}$	60	/M	M	-/M	-M	-60	.	.	.	.	.	.	.	.	.	.	.	-D	-6	-/D	6	/D	D	D
$\chi_8^{(87)}$	60	M	/M	-M	-/M	-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(88)}$	60	/M	M	-/M	-M	-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(89)}$	60	M	/M	M	/M	60	.	.	.	B	/B	4	-4	-B	-/B	1	A	/A	-/R	-3	-R	-3	-R	-/R
$\chi_8^{(90)}$	60	/M	M	/M	M	60	.	.	.	/B	B	4	-4	-/B	-B	1	/A	A	-R	-3	-/R	-3	-/R	-R

	10														20						
$\chi_8^{(91)}$	64	64	64	64	64	64	.	.	.	.	.	.	.	.	.	4	4	4	4	4	4
$\chi_8^{(92)}$	64	64	64	-64	-64	-64	.	.	.	.	.	.	.	.	.	4	4	4	-4	-4	-4
$\chi_8^{(93)}$	64	N	/N	N	/N	64	.	.	.	.	.	.	.	.	.	/B	4	B	4	B	/B
$\chi_8^{(94)}$	64	/N	N	/N	N	64	.	.	.	.	.	.	.	.	.	B	4	/B	4	/B	B
$\chi_8^{(95)}$	64	N	/N	-N	-/N	-64	.	.	.	.	.	.	.	.	.	/B	4	B	-4	-B	-/B
$\chi_8^{(96)}$	64	/N	N	-/N	-N	-64	.	.	.	.	.	.	.	.	.	B	4	/B	-4	-/B	-B
$\chi_8^{(97)}$	80	80	80	-80	-80	-80	.	.	.	.	.	.	.	.	.	2	2	2	-2	-2	-2
$\chi_8^{(98)}$	80	O	/O	-O	-/O	-80	.	.	.	.	.	.	.	.	.	/Q	2	Q	-2	-Q	-/Q
$\chi_8^{(99)}$	80	/O	O	-/O	-O	-80	.	.	.	.	.	.	.	.	.	Q	2	/Q	-2	-/Q	-Q
$\chi_8^{(100)}$	81	81	81	81	81	81	-1	-1	-1	-3	-3	-3	9	9	9	.	.	.	.	.	.
$\chi_8^{(101)}$	81	P	/P	P	/P	81	-A	-/A	-1	-R	-/R	-3	9	U	/U	.	.	.	.	.	.
$\chi_8^{(102)}$	81	/P	P	/P	P	81	-/A	-A	-1	-/R	-R	-3	9	/U	U	.	.	.	.	.	.
	30														40						
$\chi_8^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_8^{(2)}$	/A	1	A	A	/A	1	/A	1	A	1	A	/A	A	/A	1	/A	1	A	A		
$\chi_8^{(3)}$	A	1	/A	/A	A	1	A	1	/A	1	/A	A	/A	A	1	A	1	/A	/A		
$\chi_8^{(4)}$	.	.	.	.	.	.	X	X	X	-X	-X	-X	/X	/X	/X	-/X	-/X	-/X	-/A		
$\chi_8^{(5)}$	.	.	.	.	.	.	/X	/X	/X	-/X	-/X	-/X	X	X	X	-X	-X	-X	-A		
$\chi_8^{(6)}$	.	.	.	.	.	.	Y	X	/Z	-X	-/Z	-Y	/Y	Z	/X	-Z	-/X	-/Y	-1		
$\chi_8^{(7)}$	.	.	.	.	.	.	/Y	/X	Z	-/X	-Z	-/Y	Y	/Z	X	-/Z	-X	-Y	-1		
$\chi_8^{(8)}$	.	.	.	.	.	.	Z	/X	/Y	-/X	-/Y	-Z	/Z	Y	X	-Y	-X	-/Z	-/A		
$\chi_8^{(9)}$	.	.	.	.	.	.	/Z	X	Y	-X	-Y	-/Z	Z	/Y	/X	-/Y	-/X	-Z	-A		
$\chi_8^{(10)}$	V	V	V	-V	-V	-V	-X	-X	-X	-X	-X	-X	-/X	-/X	-/X	-/X	-/X	-/X	-/X	/A	
$\chi_8^{(11)}$	-V	-V	-V	V	V	V	-/X	-/X	-/X	-/X	-/X	-/X	-X	-X	-X	-X	-X	-X	-X	A	
$\chi_8^{(12)}$	W	-V	-/W	/W	-W	V	-Z	-/X	-/Y	-/X	-/Y	-Z	-/Z	-Y	-X	-Y	-X	-/Z	/A		
$\chi_8^{(13)}$	/W	V	-W	W	-/W	-V	-/Z	-X	-Y	-X	-Y	-/Z	-Z	-/Y	-/X	-/Y	-/X	-Z	A		
$\chi_8^{(14)}$	-W	V	/W	-/W	W	-V	-Y	-X	-/Z	-X	-/Z	-Y	-/Y	-Z	-/X	-Z	-/X	-/Y	1		
$\chi_8^{(15)}$	-/W	-V	W	-W	/W	V	-/Y	-/X	-Z	-/X	-Z	-/Y	-Y	-/Z	-X	-/Z	-X	-Y	1		
$\chi_8^{(16)}$	1	1	1	1	1	1	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-1	
$\chi_8^{(17)}$	/A	1	A	A	/A	1	-/R	-3	-R	-3	-R	-/R	-R	-/R	-3	-/R	-3	-R	-A		
$\chi_8^{(18)}$	A	1	/A	/A	A	1	-R	-3	-/R	-3	-/R	-R	-/R	-R	-3	-R	-3	-/R	-/A		
$\chi_8^{(19)}$	-1	-1	-1	-1	-1	-1	AA	AA	AA	AA	AA	AA	/AA	/AA	/AA	/AA	/AA	/AA	/AA	-A	
$\chi_8^{(20)}$	-1	-1	-1	-1	-1	-1	/AA	/AA	/AA	/AA	/AA	/AA	AA	AA	AA	AA	AA	AA	AA	-/A	
$\chi_8^{(21)}$	-/A	-1	-A	-A	-/A	-1	AB	/AA	/AC	/AA	/AC	AB	/AB	AC	AA	AC	AA	/AB	-1		
$\chi_8^{(22)}$	-A	-1	-/A	-/A	-A	-1	/AB	AA	AC	AA	AC	/AB	AB	/AC	/AA	/AC	/AA	AB	-1		

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$\chi_8^{(23)}$	-/A	-1	-A	-A	-/A	-1	AC	AA	/AB	AA	/AB	AC	/AC	AB	/AA	AB	/AA	/AC	-/A	
$\chi_8^{(24)}$	-A	-1	-/A	-/A	-A	-1	/AC	/AA	AB	/AA	AB	/AC	AC	/AB	AA	/AB	AA	AC	-A	
$\chi_8^{(25)}$	-1	-1	-1	-1	-1	-1	6	6	6	6	6	6	6	6	6	6	6	6	.	
$\chi_8^{(26)}$	-2	-2	-2	-2	-2	-2	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-1	
$\chi_8^{(27)}$	-/A	-1	-A	-A	-/A	-1	/D	6	D	6	D	/D	D	/D	6	/D	6	D	.	
$\chi_8^{(28)}$	-A	-1	-/A	-/A	-A	-1	D	6	/D	6	/D	D	/D	D	6	D	6	/D	.	
$\chi_8^{(29)}$	-/Q	-2	-Q	-Q	-/Q	-2	-/R	-3	-R	-3	-R	-/R	-R	-/R	-3	-/R	-3	-R	-A	
$\chi_8^{(30)}$	-Q	-2	-/Q	-/Q	-Q	-2	-R	-3	-/R	-3	-/R	-R	-/R	-R	-3	-R	-3	-/R	-/A	
$\chi_8^{(31)}$	.	.	.	.	.	.	-7	-7	-7	7	7	7	-7	-7	-7	7	7	7	-1
$\chi_8^{(32)}$	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	.	
$\chi_8^{(33)}$	.	.	.	.	.	.	AD	AD	AD	-AD	-AD	-AD	/AD	/AD	/AD	-/AD	-/AD	-/AD	-A
$\chi_8^{(34)}$	.	.	.	.	.	.	/AD	/AD	/AD	-/AD	-/AD	-/AD	AD	AD	AD	-AD	-AD	-AD	-/A
$\chi_8^{(35)}$	.	.	.	.	.	.	AE	AE	AE	-AE	-AE	-AE	/AE	/AE	/AE	-/AE	-/AE	-/AE	-1
$\chi_8^{(36)}$	.	.	.	.	.	.	/AE	/AE	/AE	-/AE	-/AE	-/AE	AE	AE	AE	-AE	-AE	-AE	-1
$\chi_8^{(37)}$	.	.	.	.	.	.	AF	/AD	/AH	-/AD	-/AH	-AF	/AF	AH	AD	-AH	-AD	-/AF	-1
$\chi_8^{(38)}$	.	.	.	.	.	.	/AF	AD	AH	-AD	-AH	-/AF	AF	/AH	/AD	-/AH	-/AD	-AF	-1
$\chi_8^{(39)}$	.	.	.	.	.	.	AG	/AE	/AI	-/AE	-/AI	-AG	/AG	AI	AE	-AI	-AE	-/AG	-A
$\chi_8^{(40)}$	.	.	.	.	.	.	/AG	AE	AI	-AE	-AI	-/AG	AG	/AI	/AE	-/AI	-/AE	-AG	-/A
$\chi_8^{(41)}$	.	.	.	.	.	.	AH	AD	/AF	-AD	-/AF	-AH	/AH	AF	/AD	-AF	-/AD	-/AH	-/A
$\chi_8^{(42)}$	.	.	.	.	.	.	/AH	/AD	AF	-/AD	-AF	-/AH	AH	/AF	AD	-/AF	-AD	-AH	-A
$\chi_8^{(43)}$	.	.	.	.	.	.	-/S	-7	-S	7	S	/S	-S	-/S	-7	/S	7	S	-A
$\chi_8^{(44)}$	.	.	.	.	.	.	-S	-7	-/S	7	/S	S	-/S	-S	-7	S	7	/S	-/A
$\chi_8^{(45)}$	.	.	.	.	.	.	AI	AE	/AG	-AE	-/AG	-AI	/AI	AG	/AE	-AG	-/AE	-/AI	-A
$\chi_8^{(46)}$	.	.	.	.	.	.	/AI	/AE	AG	-/AE	-AG	-/AI	AI	/AG	AE	-/AG	-AE	-AI	-/A
$\chi_8^{(47)}$	/A	1	A	A	/A	1	/Q	2	Q	2	Q	/Q	Q	/Q	2	/Q	2	Q	.	
$\chi_8^{(48)}$	A	1	/A	/A	A	1	Q	2	/Q	2	/Q	Q	/Q	Q	2	Q	2	/Q	.	
$\chi_8^{(49)}$	2	2	2	2	2	2	6	6	6	6	6	6	6	6	6	6	6	6	.	
$\chi_8^{(50)}$	/Q	2	Q	Q	/Q	2	/D	6	D	6	D	/D	D	/D	6	/D	6	D	.	
$\chi_8^{(51)}$	Q	2	/Q	/Q	Q	2	D	6	/D	6	/D	D	/D	D	6	D	6	/D	.	
$\chi_8^{(52)}$	-1	-1	-1	-1	-1	-1	3	3	3	3	3	3	3	3	3	3	3	3	1	
$\chi_8^{(53)}$	-V	-V	-V	V	V	V	AJ	AJ	AJ	AJ	AJ	AJ	/AJ	/AJ	/AJ	/AJ	/AJ	/AJ	-A	
$\chi_8^{(54)}$	V	V	V	-V	-V	-V	/AJ	/AJ	/AJ	/AJ	/AJ	/AJ	AJ	AJ	AJ	AJ	AJ	AJ	-/A	
$\chi_8^{(55)}$	-W	V	/W	-/W	W	-V	AK	/AJ	/AL	/AJ	/AL	AK	/AK	AL	AJ	AL	AJ	/AK	-1	
$\chi_8^{(56)}$	-/W	-V	W	-W	/W	V	/AK	AJ	AL	AJ	AL	/AK	AK	/AL	/AJ	/AL	/AJ	AK	-1	
$\chi_8^{(57)}$	W	-V	-/W	/W	-W	V	AL	AJ	/AK	AJ	/AK	AL	/AL	AK	/AJ	AK	/AJ	/AL	-/A	
$\chi_8^{(58)}$	/W	V	-W	W	-/W	-V	/AL	/AJ	AK	/AJ	AK	/AL	AL	/AK	AJ	/AK	AJ	AL	-A	
$\chi_8^{(59)}$	-/A	-1	-A	-A	-/A	-1	/R	3	R	3	R	/R	R	/R	3	/R	3	R	A	
$\chi_8^{(60)}$	-A	-1	-/A	-/A	-A	-1	R	3	/R	3	/R	R	/R	R	3	R	3	/R	/A	
$\chi_8^{(61)}$	.	.	.	.	.	.	/U	/U	/U	-/U	-/U	-/U	U	U	U	-U	-U	-U	-A
$\chi_8^{(62)}$	.	.	.	.	.	.	U	U	U	-U	-U	-U	/U	/U	/U	-/U	-/U	-/U	-/A
$\chi_8^{(63)}$	.	.	.	.	.	.	9	U	/U	-U	-/U	-9	9	U	/U	-U	-/U	-9	-1
$\chi_8^{(64)}$	.	.	.	.	.	.	9	/U	U	-/U	-U	-9	9	/U	U	-/U	-U	-9	-1
$\chi_8^{(65)}$	.	.	.	.	.	.	U	/U	9	-/U	-9	-U	/U	9	U	-9	-U	-/U	-/A
$\chi_8^{(66)}$	/U	U	9	-U	-9	-/U	U	9	/U	-9	-/U	-U	-A	
$\chi_8^{(67)}$	-Q	-Q	-Q	-/Q	-/Q	-/Q	AM	AM	AM	AM	AM	AM	/AM	/AM	/AM	/AM	/AM	/AM	.	

[illegible]

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$\chi_8^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_8^{(2)}$	/A	1	/A	1	A	/A	1	A	1	A	/A	/A	1	A	1	A	/A	/A	1	A
$\chi_8^{(3)}$	A	1	A	1	/A	A	1	/A	1	/A	A	A	1	/A	1	/A	A	A	1	/A
$\chi_8^{(4)}$	-/A	-/A	/A	/A	/A	-A	-A	-A	A	A	A	-/W	-/W	-/W	/W	/W	/W	-W	-W	-W
$\chi_8^{(5)}$	-A	-A	A	A	A	-/A	-/A	-/A	/A	/A	/A	-W	-W	-W	W	W	W	-/W	-/W	-/W
$\chi_8^{(6)}$	-A	-/A	A	/A	1	-1	-A	-/A	A	/A	1	-V	-/W	W	/W	-W	V	/W	-W	V
$\chi_8^{(7)}$	-/A	-A	/A	A	1	-1	-/A	-A	/A	A	1	V	-W	/W	W	-/W	-V	W	-/W	-V
$\chi_8^{(8)}$	-1	-A	1	A	/A	-A	-/A	-1	/A	1	A	/W	-W	V	W	-V	-/W	-V	-/W	W
$\chi_8^{(9)}$	-1	-/A	1	/A	A	-/A	-A	-1	A	1	/A	W	-/W	-V	/W	V	-W	V	-W	/W
$\chi_8^{(10)}$	/A	/A	/A	/A	/A	A	A	A	A	A	A	-/W	-/W	-/W	-/W	-/W	-/W	-W	-W	-W
$\chi_8^{(11)}$	A	A	A	A	A	/A	/A	/A	/A	/A	/A	-W	-W	-W	-W	-W	-W	-/W	-/W	-/W
$\chi_8^{(12)}$	1	A	1	A	/A	A	/A	1	/A	1	A	/W	-W	V	-W	V	/W	-V	-/W	W
$\chi_8^{(13)}$	1	/A	1	/A	A	/A	A	1	A	1	/A	W	-/W	-V	-/W	-V	W	V	-W	/W
$\chi_8^{(14)}$	A	/A	A	/A	1	1	A	/A	A	/A	1	-V	-/W	W	-/W	W	-V	/W	-W	V
$\chi_8^{(15)}$	/A	A	/A	A	1	1	/A	A	/A	A	1	V	-W	/W	-W	/W	V	W	-/W	-V
$\chi_8^{(16)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1
$\chi_8^{(17)}$	-/A	-1	-/A	-1	-A	-/A	-1	-A	-1	-A	-/A	/A	1	A	1	A	/A	/A	1	A
$\chi_8^{(18)}$	-A	-1	-A	-1	-/A	-A	-1	-/A	-1	-/A	-A	A	1	/A	1	/A	A	A	1	/A
$\chi_8^{(19)}$	-A	-A	-A	-A	-A	-/A	-/A	-/A	-/A	-/A	-/A	-/X	-/X	-/X	-/X	-/X	-/X	-X	-X	-X
$\chi_8^{(20)}$	-/A	-/A	-/A	-/A	-/A	-A	-A	-A	-A	-A	-A	-X	-X	-X	-X	-X	-X	-/X	-/X	-/X
$\chi_8^{(21)}$	-A	-/A	-A	-/A	-1	-1	-A	-/A	-A	-/A	-1	-Y	-X	-/Z	-X	-/Z	-Y	-Z	-/X	-/Y
$\chi_8^{(22)}$	-/A	-A	-/A	-A	-1	-1	-/A	-A	-/A	-A	-1	-/Y	-/X	-Z	-/X	-Z	-/Y	-/Z	-X	-Y
$\chi_8^{(23)}$	-1	-A	-1	-A	-/A	-A	-/A	-1	-/A	-1	-A	-Z	-/X	-/Y	-/X	-/Y	-Z	-Y	-X	-/Z
$\chi_8^{(24)}$	-1	-/A	-1	-/A	-A	-/A	-A	-1	-A	-1	-/A	-/Z	-X	-Y	-X	-Y	-/Z	-/Y	-/X	-Z
$\chi_8^{(25)}$	.	.	.	.	.	.	.	.	.	.	.	2	2	2	2	2	2	2	2	2
$\chi_8^{(26)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1
$\chi_8^{(27)}$	.	.	.	.	.	.	.	.	.	.	.	/Q	2	Q	2	Q	/Q	/Q	2	Q
$\chi_8^{(28)}$	.	.	.	.	.	.	.	.	.	.	.	Q	2	/Q	2	/Q	Q	Q	2	/Q
$\chi_8^{(29)}$	-/A	-1	-/A	-1	-A	-/A	-1	-A	-1	-A	-/A	/A	1	A	1	A	/A	/A	1	A
$\chi_8^{(30)}$	-A	-1	-A	-1	-/A	-A	-1	-/A	-1	-/A	-A	A	1	/A	1	/A	A	A	1	/A
$\chi_8^{(31)}$	-1	-1	1	1	1	-1	-1	-1	1	1	1	3	3	3	-3	-3	-3	3	3	3
$\chi_8^{(32)}$	.	.	.	.	.	.	.	.	.	.	.	-2	-2	-2	-2	-2	-2	-2	-2	-2
$\chi_8^{(33)}$	-A	-A	A	A	A	-/A	-/A	-/A	/A	/A	/A	-/R	-/R	-/R	/R	/R	/R	-R	-R	-R
$\chi_8^{(34)}$	-/A	-/A	/A	/A	/A	-A	-A	-A	A	A	A	-R	-R	-R	R	R	R	-/R	-/R	-/R
$\chi_8^{(35)}$	-1	-1	1	1	1	-1	-1	-1	1	1	1	-V	-V	-V	V	V	V	V	V	V
$\chi_8^{(36)}$	-1	-1	1	1	1	-1	-1	-1	1	1	1	V	V	V	-V	-V	-V	-V	-V	-V
$\chi_8^{(37)}$	-A	-/A	A	/A	1	-1	-A	-/A	A	/A	1	-3	-R	-/R	R	/R	3	-R	-/R	-3
$\chi_8^{(38)}$	-/A	-A	/A	A	1	-1	-/A	-A	/A	A	1	-3	-/R	-R	/R	R	3	-/R	-R	-3
$\chi_8^{(39)}$	-/A	-1	/A	1	A	-/A	-1	-A	1	A	/A	-W	V	/W	-V	-/W	W	W	-V	-/W
$\chi_8^{(40)}$	-A	-1	A	1	/A	-A	-1	-/A	1	/A	A	-/W	-V	W	V	-W	/W	/W	V	-W
$\chi_8^{(41)}$	-1	-A	1	A	/A	-A	-/A	-1	/A	1	A	-R	-/R	-3	/R	3	R	-3	-R	-/R
$\chi_8^{(42)}$	-1	-/A	1	/A	A	-/A	-A	-1	A	1	/A	-/R	-R	-3	R	3	/R	-3	-/R	-R
$\chi_8^{(43)}$	-/A	-1	/A	1	A	-/A	-1	-A	1	A	/A	/R	3	R	-3	-R	-/R	/R	3	R
$\chi_8^{(44)}$	-A	-1	A	1	/A	-A	-1	-/A	1	/A	A	R	3	/R	-3	-/R	-R	R	3	/R
$\chi_8^{(45)}$	-/A	-1	/A	1	A	-/A	-1	-A	1	A	/A	W	-V	-/W	V	/W	-W	-W	V	/W

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$\chi_8^{(46)}$	-A	-1	A	1	/A	-A	-1	-/A	1	/A	A	/W	V	-W	-V	W	-/W	-/W	-V	W
$\chi_8^{(47)}$	-/Q	-2	-Q	-2	-Q	-/Q	-/Q	-2	-Q
$\chi_8^{(48)}$	-Q	-2	-/Q	-2	-/Q	-Q	-Q	-2	-/Q
$\chi_8^{(49)}$	2	2	2	2	2	2	2	2	2
$\chi_8^{(50)}$	.	.	.	.	.	.	.	.	.	.	.	/Q	2	Q	2	Q	/Q	/Q	2	Q
$\chi_8^{(51)}$	.	.	.	.	.	.	.	.	.	.	.	Q	2	/Q	2	/Q	Q	Q	2	/Q
$\chi_8^{(52)}$	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_8^{(53)}$	-A	-A	-A	-A	-A	-/A	-/A	-/A	-/A	-/A	-/A	-W	-W	-W	-W	-W	-W	-/W	-/W	-/W
$\chi_8^{(54)}$	-/A	-/A	-/A	-/A	-/A	-A	-A	-A	-A	-A	-A	-/W	-/W	-/W	-/W	-/W	-/W	-W	-W	-W
$\chi_8^{(55)}$	-A	-/A	-A	-/A	-1	-1	-A	-/A	-A	-/A	-1	-V	-/W	W	-/W	W	-V	/W	-W	V
$\chi_8^{(56)}$	-/A	-A	-/A	-A	-1	-1	-/A	-A	-/A	-A	-1	V	-W	/W	-W	/W	V	W	-/W	-V
$\chi_8^{(57)}$	-1	-A	-1	-A	-/A	-A	-/A	-1	-/A	-1	-A	/W	-W	V	-W	V	/W	-V	-/W	W
$\chi_8^{(58)}$	-1	-/A	-1	-/A	-A	-/A	-A	-1	-A	-1	-/A	W	-/W	-V	-/W	-V	W	V	-W	/W
$\chi_8^{(59)}$	/A	1	/A	1	A	/A	1	A	1	A	/A	-/A	-1	-A	-1	-A	-/A	-/A	-1	-A
$\chi_8^{(60)}$	A	1	A	1	/A	A	1	/A	1	/A	A	-A	-1	-/A	-1	-/A	-A	-A	-1	-/A
$\chi_8^{(61)}$	-A	-A	A	A	A	-/A	-/A	-/A	/A	/A	/A	/R	/R	/R	-/R	-/R	-/R	R	R	R
$\chi_8^{(62)}$	-/A	-/A	/A	/A	/A	-A	-A	-A	A	A	A	R	R	R	-R	-R	-R	/R	/R	/R
$\chi_8^{(63)}$	-A	-/A	A	/A	1	-1	-A	-/A	A	/A	1	3	R	/R	-R	-/R	-3	R	/R	3
$\chi_8^{(64)}$	-/A	-A	/A	A	1	-1	-/A	-A	/A	A	1	3	/R	R	-/R	-R	-3	/R	R	3
$\chi_8^{(65)}$	-1	-A	1	A	/A	-A	-/A	-1	/A	1	A	R	/R	3	-/R	-3	-R	3	R	/R
$\chi_8^{(66)}$	-1	-/A	1	/A	A	-/A	-A	-1	A	1	/A	/R	R	3	-R	-3	-/R	3	/R	R
$\chi_8^{(67)}$	.	.	.	.	.	.	.	.	.	.	.	-/Q	-/Q	-/Q	-/Q	-/Q	-/Q	-Q	-Q	-Q
$\chi_8^{(68)}$	.	.	.	.	.	.	.	.	.	.	.	-Q	-Q	-Q	-Q	-Q	-Q	-/Q	-/Q	-/Q
$\chi_8^{(69)}$	.	.	.	.	.	.	.	.	.	.	.	-2	-Q	-/Q	-Q	-/Q	-2	-Q	-/Q	-2
$\chi_8^{(70)}$	.	.	.	.	.	.	.	.	.	.	.	-2	-/Q	-Q	-/Q	-Q	-2	-/Q	-Q	-2
$\chi_8^{(71)}$	.	.	.	.	.	.	.	.	.	.	.	-Q	-/Q	-2	-/Q	-2	-Q	-2	-Q	-/Q
$\chi_8^{(72)}$	.	.	.	.	.	.	.	.	.	.	.	-/Q	-Q	-2	-Q	-2	-/Q	-2	-/Q	-Q
$\chi_8^{(73)}$	A	A	A	A	A	/A	/A	/A	/A	/A	/A	/R	/R	/R	/R	/R	/R	R	R	R
$\chi_8^{(74)}$	/A	/A	/A	/A	/A	A	A	A	A	A	A	R	R	R	R	R	R	/R	/R	/R
$\chi_8^{(75)}$	A	/A	A	/A	1	1	A	/A	A	/A	1	3	R	/R	R	/R	3	R	/R	3
$\chi_8^{(76)}$	/A	A	/A	A	1	1	/A	A	/A	A	1	3	/R	R	/R	R	3	/R	R	3
$\chi_8^{(77)}$	1	A	1	A	/A	A	/A	1	/A	1	A	R	/R	3	/R	3	R	3	R	/R
$\chi_8^{(78)}$	1	/A	1	/A	A	/A	A	1	A	1	/A	/R	R	3	R	3	/R	3	/R	R
$\chi_8^{(79)}$	1	1	-1	-1	-1	1	1	1	-1	-1	-1	3	3	3	-3	-3	-3	3	3	3
$\chi_8^{(80)}$	.	.	.	.	.	.	.	.	.	.	.	2	2	2	2	2	2	2	2	2
$\chi_8^{(81)}$	/A	/A	-/A	-/A	-/A	A	A	A	-A	-A	-A	-/W	-/W	-/W	/W	/W	/W	-W	-W	-W
$\chi_8^{(82)}$	A	A	-A	-A	-A	/A	/A	/A	-/A	-/A	-/A	-W	-W	-W	W	W	W	-/W	-/W	-/W
$\chi_8^{(83)}$	A	/A	-A	-/A	-1	1	A	/A	-A	-/A	-1	-V	-/W	W	/W	-W	V	/W	-W	V
$\chi_8^{(84)}$	/A	A	-/A	-A	-1	1	/A	A	-/A	-A	-1	V	-W	/W	W	-/W	-V	W	-/W	-V
$\chi_8^{(85)}$	/A	1	-/A	-1	-A	/A	1	A	-1	-A	-/A	/R	3	R	-3	-R	-/R	/R	3	R
$\chi_8^{(86)}$	A	1	-A	-1	-/A	A	1	/A	-1	-/A	-A	R	3	/R	-3	-/R	-R	R	3	/R
$\chi_8^{(87)}$	1	A	-1	-A	-/A	A	/A	1	-/A	-1	-A	/W	-W	V	W	-V	-/W	-V	-/W	W
$\chi_8^{(88)}$	1	/A	-1	-/A	-A	/A	A	1	-A	-1	-/A	W	-/W	-V	/W	V	-W	V	-W	/W
$\chi_8^{(89)}$	.	.	.	.	.	.	.	.	.	.	.	/Q	2	Q	2	Q	/Q	/Q	2	Q
$\chi_8^{(90)}$	.	.	.	.	.	.	.	.	.	.	.	Q	2	/Q	2	/Q	Q	Q	2	/Q

	50										60									
$\chi_8^{(91)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(92)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(93)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(94)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(95)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(96)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(97)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(98)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(99)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(100)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(101)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(102)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	70										80									
$\chi_8^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_8^{(2)}$	1	A	/A	/A	1	A	1	A	/A	/A	1	A	1	A	/A	1	A	/A	A	/A
$\chi_8^{(3)}$	1	/A	A	A	1	/A	1	/A	A	A	1	/A	1	/A	A	1	/A	A	/A	A
$\chi_8^{(4)}$	W	W	W	2	2	2	-2	-2	-2	1	1	1	-1	-1	-1	1	1	1	-1	-1
$\chi_8^{(5)}$	/W	/W	/W	2	2	2	-2	-2	-2	1	1	1	-1	-1	-1	1	1	1	-1	-1
$\chi_8^{(6)}$	W	-V	-/W	/Q	2	Q	-2	-Q	-/Q	/A	1	A	-1	-A	-/A	1	A	/A	-A	-/A
$\chi_8^{(7)}$	/W	V	-W	Q	2	/Q	-2	-/Q	-Q	A	1	/A	-1	-/A	-A	1	/A	A	-/A	-A
$\chi_8^{(8)}$	/W	-W	V	/Q	2	Q	-2	-Q	-/Q	/A	1	A	-1	-A	-/A	1	A	/A	-A	-/A
$\chi_8^{(9)}$	W	-/W	-V	Q	2	/Q	-2	-/Q	-Q	A	1	/A	-1	-/A	-A	1	/A	A	-/A	-A
$\chi_8^{(10)}$	-W	-W	-W	1	1	1	1	1	1	.	.	.	.	.	.	2	2	2	2	2
$\chi_8^{(11)}$	-/W	-/W	-/W	1	1	1	1	1	1	.	.	.	.	.	.	2	2	2	2	2
$\chi_8^{(12)}$	-/W	W	-V	/A	1	A	1	A	/A	.	.	.	.	.	.	2	Q	/Q	Q	/Q
$\chi_8^{(13)}$	-W	/W	V	A	1	/A	1	/A	A	.	.	.	.	.	.	2	/Q	Q	/Q	Q
$\chi_8^{(14)}$	-W	V	/W	/A	1	A	1	A	/A	.	.	.	.	.	.	2	Q	/Q	Q	/Q
$\chi_8^{(15)}$	-/W	-V	W	A	1	/A	1	/A	A	.	.	.	.	.	.	2	/Q	Q	/Q	Q
$\chi_8^{(16)}$	1	1	1	2	2	2	2	2	2	1	1	1	1	1	1	.	.	.	.	.
$\chi_8^{(17)}$	1	A	/A	/Q	2	Q	2	Q	/Q	/A	1	A	1	A	/A	.	.	.	.	.
$\chi_8^{(18)}$	1	/A	A	Q	2	/Q	2	/Q	Q	A	1	/A	1	/A	A	.	.	.	.	.
$\chi_8^{(19)}$	-X	-X	-X	-X	2	2	2	2	2	2	.	.	.	.	.	.	1	1	1	1
$\chi_8^{(20)}$	-/X	-/X	-/X	2	2	2	2	2	2	.	.	.	.	.	.	.	1	1	1	1
$\chi_8^{(21)}$	-/X	-/Y	-Z	/Q	2	Q	2	Q	/Q	.	.	.	.	.	.	.	1	A	/A	A
$\chi_8^{(22)}$	-X	-Y	-/Z	Q	2	/Q	2	/Q	Q	.	.	.	.	.	.	.	1	/A	A	/A

	70														80												
$\chi_8^{(23)}$	-X	-/Z	-Y	/Q	2	Q	2	Q	/Q	.	.	.	.	.	1	A	/A	A	/A	1	/A	1	.	.	.	.	.
$\chi_8^{(24)}$	-/X	-Z	-/Y	Q	2	/Q	2	/Q	Q	.	.	.	.	.	1	/A	A	/A	A	1	A	1	.	.	.	.	.
$\chi_8^{(25)}$	2	2	2	3	3	3	3	3	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(26)}$	1	1	1	-1	-1	-1	-1	-1	-1	.	.	.	.	.	3	3	3	3	3	3	3	.	.	.	.	.	.
$\chi_8^{(27)}$	2	Q	/Q	/R	3	R	3	R	/R	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(28)}$	2	/Q	Q	R	3	/R	3	/R	R	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(29)}$	1	A	/A	-/A	-1	-A	-1	-A	-/A	.	.	.	.	.	3	R	/R	R	/R	/R	3	.	.	.	.	.	.
$\chi_8^{(30)}$	1	/A	A	-A	-1	-/A	-1	-/A	-A	.	.	.	.	.	3	/R	R	/R	R	/R	3	.	.	.	.	.	.
$\chi_8^{(31)}$	-3	-3	-3	2	2	2	-2	-2	-2	.	.	.	.	.	2	2	2	-2	-2	-2	-2	-1	-1	-1	-1	-1	-1
$\chi_8^{(32)}$	-2	-2	-2	.	.	.	.	.	.	.	.	.	.	.	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_8^{(33)}$	R	R	R	2	2	2	-2	-2	-2	.	.	.	.	.	2	2	2	-2	-2	-2	-A	-A	-A	-A	-A	-A	-A
$\chi_8^{(34)}$	/R	/R	/R	2	2	2	-2	-2	-2	.	.	.	.	.	2	2	2	-2	-2	-2	-/A	-/A	-/A	-/A	-/A	-/A	-/A
$\chi_8^{(35)}$	-V	-V	-V	2	2	2	-2	-2	-2	.	.	.	.	.	-1	-1	-1	1	1	1	-/A	-/A	-/A	-/A	-/A	-/A	-/A
$\chi_8^{(36)}$	V	V	V	2	2	2	-2	-2	-2	.	.	.	.	.	-1	-1	-1	1	1	1	-A	-A	-A	-A	-A	-A	-A
$\chi_8^{(37)}$	/R	3	R	/Q	2	Q	-2	-Q	-/Q	.	.	.	.	.	2	Q	/Q	-Q	-/Q	-2	-/A	-1	-1	-1	-1	-1	-1
$\chi_8^{(38)}$	R	3	/R	Q	2	/Q	-2	-/Q	-Q	.	.	.	.	.	2	/Q	Q	-/Q	-Q	-2	-A	-1	-1	-1	-1	-1	-1
$\chi_8^{(39)}$	V	/W	-W	/Q	2	Q	-2	-Q	-/Q	.	.	.	.	.	-1	-A	-/A	A	/A	1	-A	-/A	-/A	-/A	-/A	-/A	-/A
$\chi_8^{(40)}$	-V	W	-/W	Q	2	/Q	-2	-/Q	-Q	.	.	.	.	.	-1	-/A	-A	/A	A	1	-/A	-A	-A	-A	-A	-A	-A
$\chi_8^{(41)}$	R	/R	3	/Q	2	Q	-2	-Q	-/Q	.	.	.	.	.	2	Q	/Q	-Q	-/Q	-2	-A	-/A	-/A	-/A	-/A	-/A	-/A
$\chi_8^{(42)}$	/R	R	3	Q	2	/Q	-2	-/Q	-Q	.	.	.	.	.	2	/Q	Q	-/Q	-Q	-2	-/A	-A	-A	-A	-A	-A	-A
$\chi_8^{(43)}$	-3	-R	-/R	/Q	2	Q	-2	-Q	-/Q	.	.	.	.	.	2	Q	/Q	-Q	-/Q	-2	-1	-A	-A	-A	-A	-A	-A
$\chi_8^{(44)}$	-3	-/R	-R	Q	2	/Q	-2	-/Q	-Q	.	.	.	.	.	2	/Q	Q	-/Q	-Q	-2	-1	-/A	-/A	-/A	-/A	-/A	-/A
$\chi_8^{(45)}$	V	-W	W	/Q	2	Q	-2	-Q	-/Q	.	.	.	.	.	-1	-A	-/A	A	/A	1	-/A	-1	-1	-1	-1	-1	-1
$\chi_8^{(46)}$	-/W	-V	/W	Q	2	/Q	-2	-/Q	-Q	.	.	.	.	.	-1	-/A	-A	/A	A	1	-A	-1	-1	-1	-1	-1	-1
$\chi_8^{(47)}$	-Q	-2	-/Q	.	.	.	.	.	.	.	.	.	.	.	-1	-A	-/A	-A	-/A	-1	-1	-A	-A	-A	-A	-A	-A
$\chi_8^{(48)}$	-/Q	-2	-Q	.	.	.	.	.	.	.	.	.	.	.	-1	-/A	-A	-/A	-A	-1	-1	-/A	-/A	-/A	-/A	-/A	-/A
$\chi_8^{(49)}$	2	2	2	.	.	.	.	.	.	-1	-1	-1	-1	-1	3	3	3	3	3	3	.	.	.	.	.	.	.
$\chi_8^{(50)}$	Q	2	/Q	.	.	.	.	.	.	-/A	-1	-A	-1	-A	3	R	/R	R	/R	3	.	.	.	.	.	.	.
$\chi_8^{(51)}$	/Q	2	Q	.	.	.	.	.	.	-A	-1	-/A	-1	-/A	3	/R	R	/R	R	3	.	.	.	.	.	.	.
$\chi_8^{(52)}$	-1	-1	-1	-2	-2	-2	-2	-2	-2	.	.	.	.	.	3	3	3	3	3	3	.	.	.	.	.	.	.
$\chi_8^{(53)}$	-/W	-/W	-/W	2	2	2	2	2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(54)}$	-W	-W	-W	2	2	2	2	2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(55)}$	V	-W	/W	/Q	2	Q	2	Q	/Q	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(56)}$	-V	-/W	W	Q	2	/Q	2	/Q	Q	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(57)}$	W	-/W	-V	/Q	2	Q	2	Q	/Q	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(58)}$	/W	-W	V	Q	2	/Q	2	/Q	Q	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(59)}$	-A	-1	-/A	-/Q	-2	-Q	-2	-Q	-/Q	.	.	.	.	.	3	R	/R	R	/R	/R	3	.	.	.	.	.	.
$\chi_8^{(60)}$	-/A	-1	-A	-Q	-2	-/Q	-2	-/Q	-Q	.	.	.	.	.	3	/R	R	/R	R	/R	3	.	.	.	.	.	.
$\chi_8^{(61)}$	-R	-R	-R	2	2	2	-2	-2	-2	-1	-1	-1	1	1	1	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(62)}$	-/R	-/R	-/R	2	2	2	-2	-2	-2	-1	-1	-1	1	1	1	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(63)}$	-3	-/R	-R	/Q	2	Q	-2	-Q	-/Q	-/A	-1	-A	1	A	/A	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(64)}$	-3	-R	-/R	Q	2	/Q	-2	-/Q	-Q	-A	-1	-/A	1	/A	A	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(65)}$	-/R	-R	-3	/Q	2	Q	-2	-Q	-/Q	-/A	-1	-A	1	A	/A	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(66)}$	-R	-/R	-3	Q	2	/Q	-2	-/Q	-Q	-A	-1	-/A	1	/A	A	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(67)}$	-Q	-Q	-Q	.	.	.	.	.	.	.	.	.	.	.	1	1	1	1	1	1	/A	/A	/A	/A	/A	/A	/A

	70														80							
$\chi_8^{(68)}$	-/Q	-/Q	-/Q	.	.	.	.	.	.	.	.	.	.	.	1	1	1	1	1	1	A	A
$\chi_8^{(69)}$	-/Q	-2	-Q	.	.	.	.	.	.	.	.	.	.	.	1	A	/A	A	/A	1	A	/A
$\chi_8^{(70)}$	-Q	-2	-/Q	.	.	.	.	.	.	.	.	.	.	.	1	/A	A	/A	A	1	/A	A
$\chi_8^{(71)}$	-Q	-/Q	-2	.	.	.	.	.	.	.	.	.	.	.	1	A	/A	A	/A	1	/A	1
$\chi_8^{(72)}$	-/Q	-Q	-2	.	.	.	.	.	.	.	.	.	.	.	1	/A	A	/A	A	1	A	1
$\chi_8^{(73)}$	R	R	R	1	1	1	1	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(74)}$	/R	/R	/R	1	1	1	1	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(75)}$	/R	3	R	/A	1	A	1	A	/A	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(76)}$	R	3	/R	A	1	/A	1	/A	A	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(77)}$	R	/R	3	/A	1	A	1	A	/A	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(78)}$	/R	R	3	A	1	/A	1	/A	A	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(79)}$	-3	-3	-3	-2	-2	-2	2	2	2	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(80)}$	2	2	2	.	.	.	.	.	.	.	.	.	.	.	-3	-3	-3	-3	-3	-3	.	.
$\chi_8^{(81)}$	W	W	W	-2	-2	-2	2	2	2	.	.	.	.	.	3	3	3	-3	-3	-3	.	.
$\chi_8^{(82)}$	/W	/W	/W	-2	-2	-2	2	2	2	.	.	.	.	.	3	3	3	-3	-3	-3	.	.
$\chi_8^{(83)}$	W	-V	-/W	-/Q	-2	-Q	2	Q	/Q	.	.	.	.	.	3	R	/R	-R	-/R	-3	.	.
$\chi_8^{(84)}$	/W	V	-W	-Q	-2	-/Q	2	/Q	Q	.	.	.	.	.	3	/R	R	-/R	-R	-3	.	.
$\chi_8^{(85)}$	-3	-R	-/R	-/Q	-2	-Q	2	Q	/Q	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(86)}$	-3	-/R	-R	-Q	-2	-/Q	2	/Q	Q	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(87)}$	/W	-W	V	-/Q	-2	-Q	2	Q	/Q	.	.	.	.	.	3	R	/R	-R	-/R	-3	.	.
$\chi_8^{(88)}$	W	-/W	-V	-Q	-2	-/Q	2	/Q	Q	.	.	.	.	.	3	/R	R	-/R	-R	-3	.	.
$\chi_8^{(89)}$	2	Q	/Q	.	.	.	.	.	.	.	.	.	.	.	-3	-R	-/R	-R	-/R	-3	.	.
$\chi_8^{(90)}$	2	/Q	Q	.	.	.	.	.	.	.	.	.	.	.	-3	-/R	-R	-/R	-R	-3	.	.
$\chi_8^{(91)}$	.	.	.	.	.	.	.	.	.	-1	-1	-1	-1	-1	-2	-2	-2	-2	-2	-2	1	1
$\chi_8^{(92)}$	.	.	.	.	.	.	.	.	.	1	1	1	-1	-1	-2	-2	-2	2	2	2	1	1
$\chi_8^{(93)}$	.	.	.	.	.	.	.	.	.	-/A	-1	-A	-1	-A	-/A	-2	-Q	-/Q	-Q	-/Q	-2	A
$\chi_8^{(94)}$	.	.	.	.	.	.	.	.	.	-A	-1	-/A	-1	-/A	-A	-2	-/Q	-Q	-/Q	-Q	-2	/A
$\chi_8^{(95)}$	.	.	.	.	.	.	.	.	.	/A	1	A	-1	-A	-/A	-2	-Q	-/Q	Q	/Q	2	A
$\chi_8^{(96)}$	.	.	.	.	.	.	.	.	.	A	1	/A	-1	-/A	-A	-2	-/Q	-Q	/Q	Q	2	/A
$\chi_8^{(97)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-4	-4	-4	4	4	4	-1	-1
$\chi_8^{(98)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-4	-B	-/B	B	/B	4	-1	-A
$\chi_8^{(99)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-4	-/B	-B	/B	B	4	-1	-/A
$\chi_8^{(100)}$	.	.	.	-3	-3	-3	-3	-3	-3	1	1	1	1	1	1	.	.	.	.	.	.	.
$\chi_8^{(101)}$	.	.	.	-/R	-3	-R	-3	-R	-/R	/A	1	A	1	A	/A	.	.	.	.	.	.	.
$\chi_8^{(102)}$	.	.	.	-R	-3	-/R	-3	-/R	-R	A	1	/A	1	/A	A	.	.	.	.	.	.	.

	90										100					
$\chi_8^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_8^{(2)}$	/A	A	/A	1	/A	1	A	1	A	/A	1	A	/A	A	/A	1
$\chi_8^{(3)}$	A	/A	A	1	A	1	/A	1	/A	A	1	/A	A	/A	A	1
$\chi_8^{(4)}$	/A	-/A	-/A	-/A	A	A	A	-A	-A	-A	V	V	V	-V	-V	-V
$\chi_8^{(5)}$	A	-A	-A	-A	/A	/A	/A	-/A	-/A	-/A	-V	-V	-V	V	V	V
$\chi_8^{(6)}$	A	-1	-A	-/A	1	A	/A	-A	-/A	-1	V	/W	-W	-/W	W	-V
$\chi_8^{(7)}$	/A	-1	-/A	-A	1	/A	A	-/A	-A	-1	-V	W	-/W	-W	/W	V
$\chi_8^{(8)}$	1	-/A	-1	-A	A	/A	1	-/A	-1	-A	-V	-/W	W	/W	-W	V
$\chi_8^{(9)}$	1	-A	-1	-/A	/A	A	1	-A	-1	-/A	V	-W	/W	W	-/W	-V
$\chi_8^{(10)}$	-/A	-/A	-/A	-/A	-A	-A	-A	-A	-A	-A	.	.	.	.	.	.
$\chi_8^{(11)}$	-A	-A	-A	-A	-/A	-/A	-/A	-/A	-/A	-/A	.	.	.	.	.	.
$\chi_8^{(12)}$	-1	-/A	-1	-A	-A	-/A	-1	-/A	-1	-A	.	.	.	.	.	.
$\chi_8^{(13)}$	-1	-A	-1	-/A	-/A	-A	-1	-A	-1	-/A	.	.	.	.	.	.
$\chi_8^{(14)}$	-A	-1	-A	-/A	-1	-A	-/A	-A	-/A	-1	.	.	.	.	.	.
$\chi_8^{(15)}$	-/A	-1	-/A	-A	-1	-/A	-A	-/A	-A	-1	.	.	.	.	.	.
$\chi_8^{(16)}$	.	.	.	.	.	.	.	.	.	.	-2	-2	-2	-2	-2	-2
$\chi_8^{(17)}$	.	.	.	.	.	.	.	.	.	.	-2	-Q	-/Q	-Q	-/Q	-2
$\chi_8^{(18)}$	.	.	.	.	.	.	.	.	.	.	-2	-/Q	-Q	-/Q	-Q	-2
$\chi_8^{(19)}$	/A	/A	/A	/A	A	A	A	A	A	A	-1	-1	-1	-1	-1	-1
$\chi_8^{(20)}$	A	A	A	A	/A	/A	/A	/A	/A	/A	-1	-1	-1	-1	-1	-1
$\chi_8^{(21)}$	1	/A	1	A	A	/A	1	/A	1	A	-1	-A	-/A	-A	-/A	-1
$\chi_8^{(22)}$	1	A	1	/A	/A	A	1	A	1	/A	-1	-/A	-A	-/A	-A	-1
$\chi_8^{(23)}$	A	1	A	/A	1	A	/A	A	/A	1	-1	-A	-/A	-A	-/A	-1
$\chi_8^{(24)}$	/A	1	/A	A	1	/A	A	/A	A	1	-1	-/A	-A	-/A	-A	-1
$\chi_8^{(25)}$	.	.	.	.	.	.	.	.	.	.	2	2	2	2	2	2
$\chi_8^{(26)}$	.	.	.	.	.	.	.	.	.	.	1	1	1	1	1	1
$\chi_8^{(27)}$	.	.	.	.	.	.	.	.	.	.	2	Q	/Q	Q	/Q	2
$\chi_8^{(28)}$	.	.	.	.	.	.	.	.	.	.	2	/Q	Q	/Q	Q	2
$\chi_8^{(29)}$	.	.	.	.	.	.	.	.	.	.	1	A	/A	A	/A	1
$\chi_8^{(30)}$	.	.	.	.	.	.	.	.	.	.	1	/A	A	/A	A	1
$\chi_8^{(31)}$	-1	1	1	1	-1	-1	-1	1	1	1	.	.	.	.	.	.
$\chi_8^{(32)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1
$\chi_8^{(33)}$	-A	A	A	A	-/A	-/A	-/A	/A	/A	/A	.	.	.	.	.	.
$\chi_8^{(34)}$	-/A	/A	/A	/A	-A	-A	-A	A	A	A	.	.	.	.	.	.
$\chi_8^{(35)}$	-/A	/A	/A	/A	-A	-A	-A	A	A	A	V	V	V	-V	-V	-V
$\chi_8^{(36)}$	-A	A	A	A	-/A	-/A	-/A	/A	/A	/A	-V	-V	-V	V	V	V
$\chi_8^{(37)}$	-A	1	A	/A	-1	-A	-/A	A	/A	1	.	.	.	.	.	.
$\chi_8^{(38)}$	-/A	1	/A	A	-1	-/A	-A	/A	A	1	.	.	.	.	.	.
$\chi_8^{(39)}$	-1	/A	1	A	-A	-/A	-1	/A	1	A	-V	-/W	W	/W	-W	V
$\chi_8^{(40)}$	-1	A	1	/A	-/A	-A	-1	A	1	/A	V	-W	/W	W	-/W	-V
$\chi_8^{(41)}$	-1	/A	1	A	-A	-/A	-1	/A	1	A	.	.	.	.	.	.
$\chi_8^{(42)}$	-1	A	1	/A	-/A	-A	-1	A	1	/A	.	.	.	.	.	.
$\chi_8^{(43)}$	-/A	A	/A	1	-/A	-1	-A	1	A	/A	.	.	.	.	.	.
$\chi_8^{(44)}$	-A	/A	A	1	-A	-1	-/A	1	/A	A	.	.	.	.	.	.
$\chi_8^{(45)}$	-A	1	A	/A	-1	-A	-/A	A	/A	1	V	/W	-W	-/W	W	-V

	90										100					
$\chi_8^{(46)}$	-/A	1	/A	A	-1	-/A	-A	/A	A	1	-V	W	-/W	-W	/W	V
$\chi_8^{(47)}$	-/A	-A	-/A	-1	-/A	-1	-A	-1	-A	-/A	1	A	/A	A	/A	1
$\chi_8^{(48)}$	-A	-/A	-A	-1	-A	-1	-/A	-1	-/A	-A	1	/A	A	/A	A	1
$\chi_8^{(49)}$	-1	-1	-1	-1	-1	-1
$\chi_8^{(50)}$	-1	-A	-/A	-A	-/A	-1
$\chi_8^{(51)}$	-1	-/A	-A	-/A	-A	-1
$\chi_8^{(52)}$	-1	-1	-1	-1	-1	-1
$\chi_8^{(53)}$
$\chi_8^{(54)}$
$\chi_8^{(55)}$
$\chi_8^{(56)}$
$\chi_8^{(57)}$
$\chi_8^{(58)}$
$\chi_8^{(59)}$	-1	-A	-/A	-A	-/A	-1
$\chi_8^{(60)}$	-1	-/A	-A	-/A	-A	-1
$\chi_8^{(61)}$
$\chi_8^{(62)}$
$\chi_8^{(63)}$
$\chi_8^{(64)}$
$\chi_8^{(65)}$
$\chi_8^{(66)}$
$\chi_8^{(67)}$	/A	/A	/A	/A	A	A	A	A	A	A	1	1	1	1	1	1
$\chi_8^{(68)}$	A	A	A	A	/A	/A	/A	/A	/A	/A	1	1	1	1	1	1
$\chi_8^{(69)}$	1	/A	1	A	A	/A	1	/A	1	A	1	A	/A	A	/A	1
$\chi_8^{(70)}$	1	A	1	/A	/A	A	1	A	1	/A	1	/A	A	/A	A	1
$\chi_8^{(71)}$	A	1	A	/A	1	A	/A	A	/A	1	1	A	/A	A	/A	1
$\chi_8^{(72)}$	/A	1	/A	A	1	/A	A	/A	A	1	1	/A	A	/A	A	1
$\chi_8^{(73)}$
$\chi_8^{(74)}$
$\chi_8^{(75)}$
$\chi_8^{(76)}$
$\chi_8^{(77)}$
$\chi_8^{(78)}$
$\chi_8^{(79)}$
$\chi_8^{(80)}$	-1	-1	-1	-1	-1	-1
$\chi_8^{(81)}$	V	V	V	-V	-V	-V
$\chi_8^{(82)}$	-V	-V	-V	V	V	V
$\chi_8^{(83)}$	V	/W	-W	-/W	W	-V
$\chi_8^{(84)}$	-V	W	-/W	-W	/W	V
$\chi_8^{(85)}$
$\chi_8^{(86)}$
$\chi_8^{(87)}$	-V	-/W	W	/W	-W	V
$\chi_8^{(88)}$	V	-W	/W	W	-/W	-V
$\chi_8^{(89)}$	-1	-A	-/A	-A	-/A	-1
$\chi_8^{(90)}$	-1	-/A	-A	-/A	-A	-1

	90										100				
$\chi_8^{(91)}$	1	1	1	1	1	1	1	1	1	1	.	.	.	.	.
$\chi_8^{(92)}$	1	-1	-1	-1	1	1	1	-1	-1	-1	.	.	.	.	.
$\chi_8^{(93)}$	/A	A	/A	1	/A	1	A	1	A	/A	.	.	.	.	.
$\chi_8^{(94)}$	A	/A	A	1	A	1	/A	1	/A	A	.	.	.	.	.
$\chi_8^{(95)}$	/A	-A	-/A	-1	/A	1	A	-1	-A	-/A	.	.	.	.	.
$\chi_8^{(96)}$	A	-/A	-A	-1	A	1	/A	-1	-/A	-A	.	.	.	.	.
$\chi_8^{(97)}$	-1	1	1	1	-1	-1	-1	1	1	1	.	.	.	.	.
$\chi_8^{(98)}$	-/A	A	/A	1	-/A	-1	-A	1	A	/A	.	.	.	.	.
$\chi_8^{(99)}$	-A	/A	A	1	-A	-1	-/A	1	/A	A	.	.	.	.	.
$\chi_8^{(100)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(101)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_8^{(102)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

where $A = E(3)^2 = (-1-ER(-3))/2 = -1-b3$, $B = 4^*E(3)^2 = -2-2^*ER(-3) = -2-2i3$, $C = 5^*E(3)^2 = (-5-5^*ER(-3))/2 = -5-5b3$, $D = 6^*E(3)^2 = -3-3^*ER(-3) = -3-3i3$, $E = 10^*E(3)^2 = -5-5^*ER(-3) = -5-5i3$, $F = 15^*E(3)^2 = (-15-15^*ER(-3))/2 = -15-15b3$, $G = 20^*E(3)^2 = -10-10^*ER(-3) = -10-10i3$, $H = 24^*E(3)^2 = -12-12^*ER(-3) = -12-12i3$, $I = 30^*E(3)^2 = -15-15^*ER(-3) = -15-15i3$, $J = 36^*E(3)^2 = -18-18^*ER(-3) = -18-18i3$, $K = 40^*E(3)^2 = -20-20^*ER(-3) = -20-20i3$, $L = 45^*E(3)^2 = (-45-45^*ER(-3))/2 = -45-45b3$, $M = 60^*E(3)^2 = -30-30^*ER(-3) = -30-30i3$, $N = 64^*E(3)^2 = -32-32^*ER(-3) = -32-32i3$, $O = 80^*E(3)^2 = -40-40^*ER(-3) = -40-40i3$, $P = 81^*E(3)^2 = (-81-81^*ER(-3))/2 = -81-81b3$, $Q = 2^*E(3)^2 = -1-ER(-3) = -1-i3$, $R = 3^*E(3)^2 = (-3-3^*ER(-3))/2 = -3-3b3$, $S = 7^*E(3)^2 = (-7-7^*ER(-3))/2 = -7-7b3$, $T = 8^*E(3)^2 = -4-4^*ER(-3) = -4-4i3$, $U = 9^*E(3)^2 = (-9-9^*ER(-3))/2 = -9-9b3$, $V = E(3)-E(3)^2 = ER(-3) = i3$, $W = -E(3)-2^*E(3)^2 = (3+ER(-3))/2 = 2+b3$, $X = 2^*E(3)-E(3)^2 = (-1+3^*ER(-3))/2 = 1+3b3$, $Y = E(3)+3^*E(3)^2 = -2-ER(-3) = -2-i3$, $Z = -2^*E(3)-3^*E(3)^2 = (5+ER(-3))/2 = 3+b3$, $AA = 5^*E(3)+2^*E(3)^2 = (-7+3^*ER(-3))/2 = -2+3b3$, $AB = -5^*E(3)-3^*E(3)^2 = 4-ER(-3) = 4-i3$, $AC = -2^*E(3)+3^*E(3)^2 = (-1-5^*ER(-3))/2 = -3-5b3$, $AD = -5^*E(3)-8^*E(3)^2 = (13+3^*ER(-3))/2 = 8+3b3$, $AE = E(3)-5^*E(3)^2 = 2+3^*ER(-3) = 2+3i3$, $AF = 5^*E(3)-3^*E(3)^2 = -1+4^*ER(-3) = 3+8b3$, $AG = -E(3)-6^*E(3)^2 = (7+5^*ER(-3))/2 = 6+5b3$, $AH = 8^*E(3)+3^*E(3)^2 = (-11+5^*ER(-3))/2 = -3+5b3$, $AI = 5^*E(3)+6^*E(3)^2 = (-11-ER(-3))/2 = -6-b3$, $AJ = -3^*E(3)+6^*E(3)^2 = (-3-9^*ER(-3))/2 = -6-9b3$, $AK = 3^*E(3)+9^*E(3)^2 = -6-3^*ER(-3) = -6-3i3$, $AL = -6^*E(3)-9^*E(3)^2 = (15+3^*ER(-3))/2 = 9+3b3$, $AM = 2^*E(3)+8^*E(3)^2 = -5-3^*ER(-3) = -5-3i3$, $AN = -2^*E(3)+6^*E(3)^2 = -2-4^*ER(-3) = -2-4i3$, $AO = -8^*E(3)-6^*E(3)^2 = 7-ER(-3) = 7-i3$.

The generators of G^{s_9} are:

$$\begin{pmatrix} -1 & -2 & 0 & 2 & -1 & 0 & 1 & -1 \\ -1 & -3 & 1 & 2 & -2 & 1 & 1 & -1 \\ -1 & -4 & 0 & 4 & -3 & 1 & 1 & -1 \\ -2 & -5 & 1 & 5 & -5 & 2 & 2 & -2 \\ -1 & -4 & 0 & 4 & -4 & 2 & 2 & -2 \\ -1 & -3 & 0 & 3 & -3 & 1 & 2 & -1 \\ -1 & -2 & 0 & 2 & -2 & 1 & 1 & -1 \\ 0 & -1 & 0 & 1 & -1 & 0 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 0 & 0 & -1 & 0 & 2 & 0 \\ 0 & 1 & 1 & -1 & -2 & 1 & 2 & 0 \\ 0 & 0 & 1 & -1 & -2 & 1 & 3 & 0 \\ 0 & 1 & 1 & -1 & -4 & 2 & 4 & 0 \\ 0 & 0 & 1 & 0 & -4 & 2 & 3 & 0 \\ 0 & 0 & 1 & 0 & -3 & 1 & 2 & 1 \\ 0 & 0 & 1 & 0 & -2 & 0 & 2 & 0 \\ 1 & 0 & 0 & 0 & -1 & 0 & 1 & 0 \end{pmatrix}.$$

The representatives of conjugacy classes of G^{s_9} are:

$$\begin{pmatrix} 1 & -1 & -1 & 1 & 1 & -1 & -1 & 0 \\ 2 & -2 & -1 & 1 & 1 & 0 & -2 & 0 \\ 3 & -2 & -2 & 2 & 1 & -1 & -2 & 0 \\ 4 & -3 & -2 & 2 & 2 & -1 & -3 & -1 \\ 4 & -2 & -2 & 1 & 2 & -1 & -2 & -1 \\ 3 & -2 & -2 & 1 & 2 & -1 & -1 & -1 \\ 2 & -1 & -2 & 1 & 1 & 0 & -1 & -1 \\ 1 & -1 & -1 & 1 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 1 & -1 & 0 & -1 & 2 & -1 & 1 & -1 \\ 0 & -1 & 1 & -2 & 3 & -1 & 1 & -1 \\ 1 & -2 & 0 & -2 & 4 & -1 & 1 & -1 \\ 1 & -2 & 0 & -3 & 6 & -2 & 2 & -2 \\ 1 & -2 & 0 & -2 & 5 & -2 & 1 & -1 \\ 1 & -2 & 0 & -1 & 3 & -1 & 1 & -1 \\ 0 & -2 & 0 & 0 & 2 & -1 & 1 & -1 \\ 0 & -1 & 0 & 0 & 1 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & -1 & 0 & -1 & 2 & -1 & 1 & -1 \\ 1 & -1 & 1 & -2 & 2 & 0 & 1 & -2 \\ 2 & -2 & 0 & -2 & 3 & 0 & 1 & -2 \\ 3 & -2 & 0 & -3 & 4 & 0 & 2 & -4 \\ 3 & -2 & 0 & -2 & 3 & 0 & 1 & -3 \\ 2 & -2 & 0 & -1 & 2 & 0 & 1 & -2 \\ 1 & -2 & 0 & 0 & 1 & 0 & 1 & -2 \\ 1 & -1 & 0 & 0 & 0 & 0 & 1 & -1 \end{pmatrix}, \\
\begin{pmatrix} 1 & -1 & 0 & 0 & 1 & 0 & -2 & 1 \\ 0 & -1 & 0 & 0 & 2 & 0 & -3 & 1 \\ 1 & -1 & 0 & 0 & 2 & 0 & -4 & 2 \\ 1 & -2 & 0 & 0 & 4 & -1 & -5 & 2 \\ 1 & -1 & 0 & -1 & 4 & -1 & -4 & 2 \\ 1 & -1 & 0 & -1 & 3 & 0 & -3 & 1 \\ 1 & -1 & -1 & 0 & 2 & 0 & -2 & 1 \\ 0 & -1 & 0 & 0 & 1 & 0 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 1 & -1 & 0 & 0 & 1 & 0 & -2 & 1 \\ 1 & -1 & 0 & 0 & 1 & 1 & -3 & 0 \\ 2 & -1 & 0 & 0 & 1 & 1 & -4 & 1 \\ 3 & -2 & 0 & 0 & 2 & 1 & -5 & 0 \\ 3 & -1 & 0 & -1 & 2 & 1 & -4 & 0 \\ 2 & -1 & 0 & -1 & 2 & 1 & -3 & 0 \\ 2 & -1 & -1 & 0 & 1 & 1 & -2 & 0 \\ 1 & -1 & 0 & 0 & 0 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & -1 & 1 & 0 & -1 & 1 & -1 \\ 1 & 0 & -1 & 1 & 0 & -1 & 1 & 0 \\ 1 & -1 & -1 & 2 & 0 & -2 & 2 & -1 \\ 1 & -1 & -2 & 3 & 0 & -2 & 2 & -1 \\ 1 & -1 & -2 & 2 & 1 & -2 & 2 & -1 \\ 1 & -1 & -2 & 2 & 0 & -1 & 2 & -1 \\ 0 & 0 & -1 & 1 & 0 & -1 & 2 & -1 \\ 0 & 0 & -1 & 1 & 0 & -1 & 1 & 0 \end{pmatrix}, \\
\begin{pmatrix} 1 & 0 & -1 & 1 & 0 & -1 & 1 & -1 \\ 2 & 0 & -1 & 1 & -1 & 0 & 1 & -1 \\ 2 & -1 & -1 & 2 & -1 & -1 & 2 & -2 \\ 3 & -1 & -2 & 3 & -2 & 0 & 2 & -3 \\ 3 & -1 & -2 & 2 & -1 & 0 & 2 & -3 \\ 2 & -1 & -2 & 2 & -1 & 0 & 2 & -2 \\ 1 & 0 & -1 & 1 & -1 & 0 & 2 & -2 \\ 1 & 0 & -1 & 1 & -1 & 0 & 1 & -1 \end{pmatrix}, \begin{pmatrix} -2 & -1 & 1 & 1 & -1 & 1 & 0 & -1 \\ -3 & -2 & 1 & 2 & -1 & 0 & 1 & -1 \\ -4 & -2 & 1 & 3 & -2 & 1 & 0 & -1 \\ -6 & -3 & 2 & 4 & -3 & 1 & 1 & -1 \\ -5 & -2 & 1 & 3 & -2 & 1 & 1 & -1 \\ -4 & -1 & 1 & 2 & -2 & 1 & 1 & -1 \\ -3 & -1 & 1 & 1 & -1 & 1 & 0 & 0 \\ -2 & 0 & 1 & 0 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 1 & 1 & 0 & 0 & -1 & 1 & 0 & -1 \\ 1 & 0 & 1 & 0 & -1 & 1 & 0 & -1 \\ 2 & 0 & 0 & 1 & -2 & 2 & 0 & -2 \\ 2 & 0 & 0 & 0 & -1 & 2 & 0 & -2 \\ 1 & 0 & 0 & 0 & -1 & 2 & 0 & -1 \\ 1 & 0 & 0 & 0 & -1 & 1 & 1 & -1 \\ 1 & 0 & 0 & 0 & -1 & 1 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 1 & 2 & -1 & -1 & 1 & -1 & 0 & 0 \\ 2 & 2 & -2 & -1 & 2 & -2 & 0 & 1 \\ 2 & 3 & -2 & -2 & 3 & -3 & 1 & 0 \\ 3 & 4 & -3 & -3 & 5 & -4 & 0 & 1 \\ 2 & 3 & -2 & -2 & 4 & -4 & 0 & 1 \\ 2 & 2 & -2 & -1 & 3 & -3 & 0 & 0 \\ 1 & 2 & -1 & -1 & 2 & -2 & 0 & 0 \\ 0 & 1 & -1 & 0 & 1 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 2 & -1 & -1 & 1 & -1 & 0 & 0 \\ 3 & 2 & -2 & -1 & 1 & -1 & 0 & 0 \\ 3 & 3 & -2 & -2 & 2 & -2 & 1 & -1 \\ 5 & 4 & -3 & -3 & 3 & -2 & 0 & -1 \\ 4 & 3 & -2 & -2 & 2 & -2 & 0 & -1 \\ 3 & 2 & -2 & -1 & 2 & -2 & 0 & -1 \\ 2 & 2 & -1 & -1 & 1 & -1 & 0 & -1 \\ 1 & 1 & -1 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 1 & 2 & 0 & -2 & 1 & 0 & -1 & 1 \\ 1 & 3 & -1 & -2 & 2 & -1 & -1 & 1 \\ 1 & 4 & 0 & -4 & 3 & -1 & -1 & 1 \\ 2 & 5 & -1 & -5 & 5 & -2 & -2 & 2 \\ 1 & 4 & 0 & -4 & 4 & -2 & -2 & 2 \\ 1 & 3 & 0 & -3 & 3 & -1 & -2 & 1 \\ 1 & 2 & 0 & -2 & 2 & -1 & -1 & 1 \\ 0 & 1 & 0 & -1 & 1 & 0 & -1 & 1 \end{pmatrix}, \\
\begin{pmatrix} 1 & 2 & 0 & -2 & 1 & 0 & -1 & 1 \\ 2 & 3 & -1 & -2 & 1 & 0 & -1 & 0 \\ 2 & 4 & 0 & -4 & 2 & 0 & -1 & 0 \\ 4 & 5 & -1 & -5 & 3 & 0 & -2 & 0 \\ 3 & 4 & 0 & -4 & 2 & 0 & -2 & 0 \\ 2 & 3 & 0 & -3 & 2 & 0 & -2 & 0 \\ 2 & 2 & 0 & -2 & 1 & 0 & -1 & 0 \\ 1 & 1 & 0 & -1 & 0 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 2 & 1 & -1 & -1 & 1 & -1 & 0 & 1 \\ 2 & 2 & -1 & -2 & 2 & -1 & -1 & 2 \\ 3 & 2 & -1 & -3 & 3 & -2 & 0 & 2 \\ 4 & 3 & -2 & -4 & 5 & -3 & -1 & 3 \\ 3 & 2 & -1 & -3 & 4 & -3 & -1 & 3 \\ 3 & 1 & -1 & -2 & 3 & -2 & -1 & 2 \\ 2 & 1 & -1 & -1 & 2 & -2 & 0 & 1 \\ 1 & 0 & -1 & 0 & 1 & -1 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 2 & 1 & -1 & -1 & 1 & -1 & 0 & 1 \\ 3 & 2 & -1 & -2 & 1 & 0 & -1 & 1 \\ 4 & 2 & -1 & -3 & 2 & -1 & 0 & 1 \\ 6 & 3 & -2 & -4 & 3 & -1 & -1 & 1 \\ 5 & 2 & -1 & -3 & 2 & -1 & -1 & 1 \\ 4 & 1 & -1 & -2 & 2 & -1 & -1 & 1 \\ 3 & 1 & -1 & -1 & 1 & -1 & 0 & 0 \\ 2 & 0 & -1 & 0 & 0 & 0 & 0 & 0 \end{pmatrix}.
\end{pmatrix}$$

The character table of G^{s_9} :

	10										20									
$\chi_9^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_9^{(2)}$	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1
$\chi_9^{(3)}$	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	1	1	-1	-1	1	1	-1	-1
$\chi_9^{(4)}$	1	-1	1	-1	1	-1	-1	1	-1	1	-1	1	1	-1	-1	1	1	-1	-1	1
$\chi_9^{(5)}$	1	A	-A	A	-A	A	1	-1	1	-1	-/A	/A	-B	B	-/A	/A	-/B	/B	1	-1
$\chi_9^{(6)}$	1	B	-B	B	-B	B	1	-1	1	-1	-/B	/B	-/A	/A	-/B	/B	-A	A	1	-1
$\chi_9^{(7)}$	1	/B	-/B	/B	-/B	/B	1	-1	1	-1	-B	B	-A	A	-B	B	-/A	/A	1	-1
$\chi_9^{(8)}$	1	/A	-/A	/A	-/A	/A	1	-1	1	-1	-A	A	-/B	/B	-A	A	-B	B	1	-1
$\chi_9^{(9)}$	1	-A	-A	-A	-A	-A	-1	-1	-1	-1	/A	/A	-B	-B	/A	/A	-/B	-/B	-1	-1
$\chi_9^{(10)}$	1	-B	-B	-B	-B	-B	-1	-1	-1	-1	/B	/B	-/A	-/A	/B	/B	-A	-A	-1	-1
$\chi_9^{(11)}$	1	-/B	-/B	-/B	-/B	-/B	-1	-1	-1	-1	B	B	-A	-A	B	B	-/A	-/A	-1	-1
$\chi_9^{(12)}$	1	-/A	-/A	-/A	-/A	-/A	-1	-1	-1	-1	A	A	-/B	-/B	A	A	-B	-B	-1	-1
$\chi_9^{(13)}$	1	A	-A	A	-A	A	-1	1	-1	1	/A	-/A	-B	B	/A	-/A	-/B	/B	-1	1
$\chi_9^{(14)}$	1	B	-B	B	-B	B	-1	1	-1	1	/B	-/B	-/A	/A	/B	-/B	-A	A	-1	1
$\chi_9^{(15)}$	1	/B	-/B	/B	-/B	/B	-1	1	-1	1	B	-B	-A	A	B	-B	-/A	/A	-1	1
$\chi_9^{(16)}$	1	/A	-/A	/A	-/A	/A	-1	1	-1	1	A	-A	-/B	/B	A	-A	-B	B	-1	1
$\chi_9^{(17)}$	1	-A	-A	-A	-A	-A	1	1	1	1	-/A	-/A	-B	-B	-/A	-/A	-/B	-/B	1	1
$\chi_9^{(18)}$	1	-B	-B	-B	-B	-B	1	1	1	1	-/B	-/B	-/A	-/A	-/B	-/B	-A	-A	1	1
$\chi_9^{(19)}$	1	-/B	-/B	-/B	-/B	-/B	1	1	1	1	-B	-B	-A	-A	-B	-B	-/A	-/A	1	1
$\chi_9^{(20)}$	1	-/A	-/A	-/A	-/A	-/A	1	1	1	1	-A	-A	-/B	-/B	-A	-A	-B	-B	1	1
$\chi_9^{(21)}$	1	C	-/C	/C	1	-1	1	-1	-/C	/C	1	-1	-C	C	-/C	/C	-C	C	-C	C
$\chi_9^{(22)}$	1	/C	-C	C	1	-1	1	-1	-C	C	1	-1	-/C	/C	-C	C	-/C	/C	-/C	/C
$\chi_9^{(23)}$	1	-C	-/C	-/C	1	1	-1	-1	/C	/C	-1	-1	-C	-C	/C	/C	-C	-C	C	C
$\chi_9^{(24)}$	1	-/C	-C	-C	1	1	-1	-1	C	C	-1	-1	-/C	-/C	C	C	-/C	-/C	/C	/C
$\chi_9^{(25)}$	1	C	-/C	/C	1	-1	-1	1	/C	-/C	-1	1	-C	C	/C	-/C	-C	C	C	-C
$\chi_9^{(26)}$	1	/C	-C	C	1	-1	-1	1	C	-C	-1	1	-/C	/C	C	-C	-/C	/C	/C	-/C
$\chi_9^{(27)}$	1	-C	-/C	-/C	1	1	1	1	-/C	-/C	1	1	-C	-C	-/C	-/C	-C	-C	-C	-C
$\chi_9^{(28)}$	1	-/C	-C	-C	1	1	1	1	-C	-C	1	1	-/C	-/C	-C	-C	-/C	-/C	-/C	-/C
$\chi_9^{(29)}$	1	D	-/G	/G	-A	A	1	-1	-/C	/C	-/A	/A	-E	E	-/D	/D	-F	F	-C	C
$\chi_9^{(30)}$	1	E	-/F	/F	-B	B	1	-1	-/C	/C	-/B	/B	-G	G	-/E	/E	-D	D	-C	C
$\chi_9^{(31)}$	1	F	-/E	/E	-/B	/B	1	-1	-/C	/C	-B	B	-D	D	-/F	/F	-G	G	-C	C
$\chi_9^{(32)}$	1	G	-/D	/D	-/A	/A	1	-1	-/C	/C	-A	A	-F	F	-/G	/G	-E	E	-C	C
$\chi_9^{(33)}$	1	/G	-D	D	-A	A	1	-1	-C	C	-/A	/A	-/F	/F	-G	G	-/E	/E	-/C	/C
$\chi_9^{(34)}$	1	/F	-E	E	-B	B	1	-1	-C	C	-/B	/B	-/D	/D	-F	F	-/G	/G	-/C	/C
$\chi_9^{(35)}$	1	/E	-F	F	-/B	/B	1	-1	-C	C	-B	B	-/G	/G	-E	E	-/D	/D	-/C	/C
$\chi_9^{(36)}$	1	/D	-G	G	-/A	/A	1	-1	-C	C	-A	A	-/E	/E	-D	D	-/F	/F	-/C	/C
$\chi_9^{(37)}$	1	-D	-/G	-/G	-A	-A	-1	-1	/C	/C	/A	/A	-E	-E	/D	/D	-F	-F	C	C
$\chi_9^{(38)}$	1	-E	-/F	-/F	-B	-B	-1	-1	/C	/C	/B	/B	-G	-G	/E	/E	-D	-D	C	C
$\chi_9^{(39)}$	1	-F	-/E	-/E	-/B	-/B	-1	-1	/C	/C	B	B	-D	-D	/F	/F	-G	-G	C	C
$\chi_9^{(40)}$	1	-G	-/D	-/D	-/A	-/A	-1	-1	/C	/C	A	A	-F	-F	/G	/G	-E	-E	C	C
$\chi_9^{(41)}$	1	-/G	-D	-D	-A	-A	-1	-1	C	C	/A	/A	-/F	-/F	G	G	-/E	-/E	/C	/C
$\chi_9^{(42)}$	1	-/F	-E	-E	-B	-B	-1	-1	C	C	/B	/B	-/D	-/D	F	F	-/G	-/G	/C	/C
$\chi_9^{(43)}$	1	-/E	-F	-F	-/B	-/B	-1	-1	C	C	B	B	-/G	-/G	E	E	-/D	-/D	/C	/C
$\chi_9^{(44)}$	1	-/D	-G	-G	-/A	-/A	-1	-1	C	C	A	A	-/E	-/E	D	D	-/F	-/F	/C	/C
$\chi_9^{(45)}$	1	D	-/G	/G	-A	A	-1	1	/C	-/C	/A	-/A	-E	E	/D	-/D	-F	F	C	-C

	10																20						
$\chi_9^{(46)}$	1	E	-/F	/F	-B	B	-1	1	/C	-/C	/B	-/B	-G	G	/E	-/E	-D	D	C	-C	A	-A	/G
$\chi_9^{(47)}$	1	F	-/E	/E	-/B	/B	-1	1	/C	-/C	B	-B	-D	D	/F	-/F	-G	G	C	-C	/A	-/A	/D
$\chi_9^{(48)}$	1	G	-/D	/D	-/A	/A	-1	1	/C	-/C	A	-A	-F	F	/G	-/G	-E	E	C	-C	B	-B	/F
$\chi_9^{(49)}$	1	/G	-D	D	-A	A	-1	1	C	-C	/A	-/A	-/F	/F	G	-G	-/E	/E	/C	-/C	/B	-/B	F
$\chi_9^{(50)}$	1	/F	-E	E	-B	B	-1	1	C	-C	/B	-/B	-/D	/D	F	-F	-/G	/G	/C	-/C	A	-A	D
$\chi_9^{(51)}$	1	/E	-F	F	-/B	/B	-1	1	C	-C	B	-B	-/G	/G	E	-E	-/D	/D	/C	-/C	/A	-/A	G
$\chi_9^{(52)}$	1	/D	-G	G	-/A	/A	-1	1	C	-C	A	-A	-/E	/E	D	-D	-/F	/F	/C	-/C	B	-B	E
$\chi_9^{(53)}$	1	-D	-/G	-/G	-A	-A	1	1	-/C	-/C	-/A	-/A	-E	-E	-/D	-/D	-F	-F	-C	-C	-/B	-/B	-/E
$\chi_9^{(54)}$	1	-E	-/F	-/F	-B	-B	1	1	-/C	-/C	-/B	-/B	-G	-G	-/E	-/E	-D	-D	-C	-C	-A	-A	-/G
$\chi_9^{(55)}$	1	-F	-/E	-/E	-/B	-/B	1	1	-/C	-/C	-B	-B	-D	-D	-/F	-/F	-G	-G	-C	-C	-/A	-/A	-/D
$\chi_9^{(56)}$	1	-G	-/D	-/D	-/A	-/A	1	1	-/C	-/C	-A	-A	-F	-F	-/G	-/G	-E	-E	-C	-C	-B	-B	-/F
$\chi_9^{(57)}$	1	-/G	-D	-D	-A	-A	1	1	-C	-C	-/A	-/A	-/F	-/F	-G	-G	-/E	-/E	-/C	-/C	-/B	-/B	-F
$\chi_9^{(58)}$	1	-/F	-E	-E	-B	-B	1	1	-C	-C	-/B	-/B	-/D	-/D	-F	-F	-/G	-/G	-/C	-/C	-A	-A	-D
$\chi_9^{(59)}$	1	-/E	-F	-F	-/B	-/B	1	1	-C	-C	-B	-B	-/G	-/G	-E	-E	-/D	-/D	-/C	-/C	-/A	-/A	-G
$\chi_9^{(60)}$	1	-/D	-G	-G	-/A	-/A	1	1	-C	-C	-A	-A	-/E	-/E	-D	-D	-/F	-/F	-/C	-/C	-B	-B	-E
	30																40						
$\chi_9^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
$\chi_9^{(2)}$	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	
$\chi_9^{(3)}$	-1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	1	1	1	1	1	1	-1	-1	1	
$\chi_9^{(4)}$	1	1	-1	-1	1	-1	1	1	-1	1	-1	-1	1	1	-1	1	-1	1	-1	-1	1	1	
$\chi_9^{(5)}$	/B	-B	B	-B	B	-/A	/A	-/A	/A	-B	B	-B	B	-/B	/B	-/B	/B	1	-1	-/B	/B	-/A	
$\chi_9^{(6)}$	A	-/A	/A	-/A	/A	-/B	/B	-/B	/B	-/A	/A	-/A	/A	-A	A	-A	A	1	-1	-A	A	-/B	
$\chi_9^{(7)}$	/A	-A	A	-A	A	-B	B	-B	B	-A	A	-A	A	-/A	/A	-/A	/A	1	-1	-/A	/A	-B	
$\chi_9^{(8)}$	B	-/B	/B	-/B	/B	-A	A	-A	A	-/B	/B	-/B	/B	-B	B	-B	B	1	-1	-B	B	-A	
$\chi_9^{(9)}$	/B	-B	-B	B	B	/A	/A	-/A	-/A	-B	-B	B	B	-/B	-/B	-/B	-/B	1	1	/B	/B	-/A	
$\chi_9^{(10)}$	A	-/A	-/A	/A	/A	/B	/B	-/B	-/B	-/A	-/A	/A	/A	-A	-A	-A	-A	1	1	A	A	-/B	
$\chi_9^{(11)}$	/A	-A	-A	A	A	B	B	-B	-B	-A	-A	A	A	-/A	-/A	-/A	-/A	1	1	/A	/A	-B	
$\chi_9^{(12)}$	B	-/B	-/B	/B	/B	A	A	-A	-A	-/B	-/B	/B	/B	-B	-B	-B	-B	1	1	B	B	-A	
$\chi_9^{(13)}$	-/B	-B	B	B	-B	/A	-/A	-/A	/A	-B	B	B	-B	-/B	/B	-/B	/B	1	-1	/B	-/B	-/A	
$\chi_9^{(14)}$	-A	-/A	/A	/A	-/A	/B	-/B	-/B	/B	-/A	/A	/A	-/A	-A	A	-A	A	1	-1	A	-A	-/B	
$\chi_9^{(15)}$	-/A	-A	A	A	-A	B	-B	-B	B	-A	A	A	-A	-/A	/A	-/A	/A	1	-1	/A	-/A	-B	
$\chi_9^{(16)}$	-B	-/B	/B	/B	-/B	A	-A	-A	A	-/B	/B	/B	-/B	-B	B	-B	B	1	-1	B	-B	-A	
$\chi_9^{(17)}$	-/B	-B	-B	-B	-B	-/A	-/A	-/A	-/A	-B	-B	-B	-B	-/B	-/B	-/B	-/B	1	1	-/B	-/B	-/A	
$\chi_9^{(18)}$	-A	-/A	-/A	-/A	-/A	-/B	-/B	-/B	-/B	-/A	-/A	-/A	-/A	-A	-A	-A	-A	1	1	-A	-A	-/B	
$\chi_9^{(19)}$	-/A	-A	-A	-A	-A	-B	-B	-B	-B	-A	-A	-A	-A	-/A	-/A	-/A	-/A	1	1	-/A	-/A	-B	
$\chi_9^{(20)}$	-B	-/B	-/B	-/B	-/B	-A	-A	-A	-A	-/B	-/B	-/B	-/B	-B	-B	-B	-B	1	1	-B	-B	-A	
$\chi_9^{(21)}$	/C	-/C	/C	1	-1	-C	C	-C	C	1	-1	-/C	/C	-/C	/C	1	-1	-C	C	-C	C	-/C	
$\chi_9^{(22)}$	C	-C	C	1	-1	-/C	/C	-/C	/C	1	-1	-C	C	-C	C	1	-1	-/C	/C	-/C	/C	-C	
$\chi_9^{(23)}$	/C	-/C	-/C	-1	-1	C	C	-C	-C	1	1	/C	/C	-/C	-/C	1	1	-C	-C	C	C	-/C	
$\chi_9^{(24)}$	C	-C	-C	-1	-1	/C	/C	-/C	-/C	1	1	C	C	-C	-C	1	1	-/C	-/C	/C	/C	-C	
$\chi_9^{(25)}$	-/C	-/C	/C	-1	1	C	-C	-C	C	1	-1	/C	-/C	-/C	/C	1	-1	-C	C	C	-C	-/C	
$\chi_9^{(26)}$	-C	-C	C	-1	1	/C	-/C	-/C	/C	1	-1	C	-C	-C	C	1	-1	-/C	/C	/C	-/C	-C	
$\chi_9^{(27)}$	-/C	-/C	-/C	1	1	-C	-C	-C	-C	1	1	-/C	-/C	-/C	-/C	1	1	-C	-C	-C	-C	-/C	
$\chi_9^{(28)}$	-C	-C	-C	1	1	-/C	-/C	-/C	-/C	1	1	-C	-C	-C	-C	1	1	-/C	-/C	-/C	-/C	-C	
$\chi_9^{(29)}$	/E	-/F	/F	-B	B	-G	G	-G	G	-B	B	-/F	/F	-/E	/E	-/B	/B	-C	C	-F	F	-/D	
$\chi_9^{(30)}$	/G	-/D	/D	-/A	/A	-F	F	-F	F	-/A	/A	-/D	/D	-/G	/G	-A	A	-C	C	-D	D	-/E	

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$\chi_9^{(31)}$	/D	-/G	/G	-A	A	-E	E	-E	E	-A	A	-/G	/G	-/D	/D	-/A	/A	-C	C	-G	G	-/F
$\chi_9^{(32)}$	/F	-/E	/E	-/B	/B	-D	D	-D	D	-/B	/B	-/E	/E	-/F	/F	-B	B	-C	C	-E	E	-/G
$\chi_9^{(33)}$	F	-E	E	-B	B	-/D	/D	-/D	/D	-B	B	-E	E	-F	F	-/B	/B	-/C	/C	-/E	/E	-G
$\chi_9^{(34)}$	D	-G	G	-/A	/A	-/E	/E	-/E	/E	-/A	/A	-G	G	-D	D	-A	A	-/C	/C	-/G	/G	-F
$\chi_9^{(35)}$	G	-D	D	-A	A	-/F	/F	-/F	/F	-A	A	-D	D	-G	G	-/A	/A	-/C	/C	-/D	/D	-E
$\chi_9^{(36)}$	E	-F	F	-/B	/B	-/G	/G	-/G	/G	-/B	/B	-F	F	-E	E	-B	B	-/C	/C	-/F	/F	-D
$\chi_9^{(37)}$	/E	-/F	-/F	B	B	G	G	-G	-G	-B	-B	/F	/F	-/E	-/E	-/B	-/B	-C	-C	F	F	-/D
$\chi_9^{(38)}$	/G	-/D	-/D	/A	/A	F	F	-F	-F	-/A	-/A	/D	/D	-/G	-/G	-A	-A	-C	-C	D	D	-/E
$\chi_9^{(39)}$	/D	-/G	-/G	A	A	E	E	-E	-E	-A	-A	/G	/G	-/D	-/D	-/A	-/A	-C	-C	G	G	-/F
$\chi_9^{(40)}$	/F	-/E	-/E	/B	/B	D	D	-D	-D	-/B	-/B	/E	/E	-/F	-/F	-B	-B	-C	-C	E	E	-/G
$\chi_9^{(41)}$	F	-E	-E	B	B	/D	/D	-/D	-/D	-B	-B	E	E	-F	-F	-/B	-/B	-/C	-/C	/E	/E	-G
$\chi_9^{(42)}$	D	-G	-G	/A	/A	/E	/E	-/E	-/E	-/A	-/A	G	G	-D	-D	-A	-A	-/C	-/C	/G	/G	-F
$\chi_9^{(43)}$	G	-D	-D	A	A	/F	/F	-/F	-/F	-A	-A	D	D	-G	-G	-/A	-/A	-/C	-/C	/D	/D	-E
$\chi_9^{(44)}$	E	-F	-F	/B	/B	/G	/G	-/G	-/G	-/B	-/B	F	F	-E	-E	-B	-B	-/C	-/C	/F	/F	-D
$\chi_9^{(45)}$	-/E	-/F	/F	B	-B	G	-G	-G	G	-B	B	/F	-/F	-/E	/E	-/B	/B	-C	C	F	-F	-/D
$\chi_9^{(46)}$	-/G	-/D	/D	/A	-/A	F	-F	-F	F	-/A	/A	/D	-/D	-/G	/G	-A	A	-C	C	D	-D	-/E
$\chi_9^{(47)}$	-/D	-/G	/G	A	-A	E	-E	-E	E	-A	A	/G	-/G	-/D	/D	-/A	/A	-C	C	G	-G	-/F
$\chi_9^{(48)}$	-/F	-/E	/E	/B	-/B	D	-D	-D	D	-/B	/B	/E	-/E	-/F	/F	-B	B	-C	C	E	-E	-/G
$\chi_9^{(49)}$	-F	-E	E	B	-B	/D	-/D	-/D	/D	-B	B	E	-E	-F	F	-/B	/B	-/C	/C	/E	-/E	-G
$\chi_9^{(50)}$	-D	-G	G	/A	-/A	/E	-/E	-/E	/E	-/A	/A	G	-G	-D	D	-A	A	-/C	/C	/G	-/G	-F
$\chi_9^{(51)}$	-G	-D	D	A	-A	/F	-/F	-/F	/F	-A	A	D	-D	-G	G	-/A	/A	-/C	/C	/D	-/D	-E
$\chi_9^{(52)}$	-E	-F	F	/B	-/B	/G	-/G	-/G	/G	-/B	/B	F	-F	-E	E	-B	B	-/C	/C	/F	-/F	-D
$\chi_9^{(53)}$	-/E	-/F	-/F	-B	-B	-G	-G	-G	-G	-B	-B	-/F	-/F	-/E	-/E	-/B	-/B	-C	-C	-F	-F	-/D
$\chi_9^{(54)}$	-/G	-/D	-/D	-/A	-/A	-F	-F	-F	-F	-/A	-/A	-/D	-/D	-/G	-/G	-A	-A	-C	-C	-D	-D	-/E
$\chi_9^{(55)}$	-/D	-/G	-/G	-A	-A	-E	-E	-E	-E	-A	-A	-/G	-/G	-/D	-/D	-/A	-/A	-C	-C	-G	-G	-/F
$\chi_9^{(56)}$	-/F	-/E	-/E	-/B	-/B	-D	-D	-D	-D	-/B	-/B	-/E	-/E	-/F	-/F	-B	-B	-C	-C	-E	-E	-/G
$\chi_9^{(57)}$	-F	-E	-E	-B	-B	-/D	-/D	-/D	-/D	-B	-B	-E	-E	-F	-F	-/B	-/B	-/C	-/C	-/E	-/E	-G
$\chi_9^{(58)}$	-D	-G	-G	-/A	-/A	-/E	-/E	-/E	-/E	-/A	-/A	-G	-G	-D	-D	-A	-A	-/C	-/C	-/G	-/G	-F
$\chi_9^{(59)}$	-G	-D	-D	-A	-A	-/F	-/F	-/F	-/F	-A	-A	-D	-D	-G	-G	-/A	-/A	-/C	-/C	-/D	-/D	-E
$\chi_9^{(60)}$	-E	-F	-F	-/B	-/B	-/G	-/G	-/G	-/G	-/B	-/B	-F	-F	-E	-E	-B	-B	-/C	-/C	-/F	-/F	-D
	50										60											
$\chi_9^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
$\chi_9^{(2)}$	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1							
$\chi_9^{(3)}$	1	-1	-1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1							
$\chi_9^{(4)}$	-1	-1	1	1	-1	1	-1	1	-1	-1	1	-1	1	-1	1							
$\chi_9^{(5)}$	/A	-B	B	-/A	/A	1	-1	-A	-1	-A	A	-A	A	-A	A							
$\chi_9^{(6)}$	/B	-/A	/A	-/B	/B	1	-1	-B	-1	-B	B	-B	B	-B	B							
$\chi_9^{(7)}$	B	-A	A	-B	B	1	-1	-/B	-1	-/B	/B	-/B	/B	-/B	/B							
$\chi_9^{(8)}$	A	-/B	/B	-A	A	1	-1	-/A	-1	-/A	/A	-/A	/A	-/A	/A							
$\chi_9^{(9)}$	-/A	B	B	-/A	-/A	1	1	-A	1	A	A	A	A	A	A							
$\chi_9^{(10)}$	-/B	/A	/A	-/B	-/B	1	1	-B	1	B	B	B	B	B	B							
$\chi_9^{(11)}$	-B	A	A	-B	-B	1	1	-/B	1	/B	/B	/B	/B	/B	/B							
$\chi_9^{(12)}$	-A	/B	/B	-A	-A	1	1	-/A	1	/A	/A	/A	/A	/A	/A							
$\chi_9^{(13)}$	/A	B	-B	-/A	/A	1	-1	-A	-1	A	-A	A	-A	A	-A							
$\chi_9^{(14)}$	/B	/A	-/A	-/B	/B	1	-1	-B	-1	B	-B	B	-B	B	-B							
$\chi_9^{(15)}$	B	A	-A	-B	B	1	-1	-/B	-1	/B	-/B	/B	-/B	/B	-/B							

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$\chi_9^{(16)}$	A	/B	-/B	-A	A	1	-1	-/A	-1	/A	-/A	/A	-/A	/A	-/A
$\chi_9^{(17)}$	-/A	-B	-B	-/A	-/A	1	1	-A	1	-A	-A	-A	-A	-A	-A
$\chi_9^{(18)}$	-/B	-/A	-/A	-/B	-/B	1	1	-B	1	-B	-B	-B	-B	-B	-B
$\chi_9^{(19)}$	-B	-A	-A	-B	-B	1	1	-/B	1	-/B	-/B	-/B	-/B	-/B	-/B
$\chi_9^{(20)}$	-A	-/B	-/B	-A	-A	1	1	-/A	1	-/A	-/A	-/A	-/A	-/A	-/A
$\chi_9^{(21)}$	/C	-C	C	1	-1	-/C	/C	-C	-1	1	-1	-/C	/C	-C	C
$\chi_9^{(22)}$	C	-/C	/C	1	-1	-C	C	-/C	-1	1	-1	-C	C	-/C	/C
$\chi_9^{(23)}$	-/C	C	C	1	1	-/C	-/C	-C	1	-1	-1	/C	/C	C	C
$\chi_9^{(24)}$	-C	/C	/C	1	1	-C	-C	-/C	1	-1	-1	C	C	/C	/C
$\chi_9^{(25)}$	/C	C	-C	1	-1	-/C	/C	-C	-1	-1	1	/C	-/C	C	-C
$\chi_9^{(26)}$	C	/C	-/C	1	-1	-C	C	-/C	-1	-1	1	C	-C	/C	-/C
$\chi_9^{(27)}$	-/C	-C	-C	1	1	-/C	-/C	-C	1	1	1	-/C	-/C	-C	-C
$\chi_9^{(28)}$	-C	-/C	-/C	1	1	-C	-C	-/C	1	1	1	-C	-C	-/C	-/C
$\chi_9^{(29)}$	/D	-E	E	-/A	/A	-/C	/C	-D	-1	-A	A	-/G	/G	-D	D
$\chi_9^{(30)}$	/E	-G	G	-/B	/B	-/C	/C	-E	-1	-B	B	-/F	/F	-E	E
$\chi_9^{(31)}$	/F	-D	D	-B	B	-/C	/C	-F	-1	-/B	/B	-/E	/E	-F	F
$\chi_9^{(32)}$	/G	-F	F	-A	A	-/C	/C	-G	-1	-/A	/A	-/D	/D	-G	G
$\chi_9^{(33)}$	G	-/F	/F	-/A	/A	-C	C	-/G	-1	-A	A	-D	D	-/G	/G
$\chi_9^{(34)}$	F	-/D	/D	-/B	/B	-C	C	-/F	-1	-B	B	-E	E	-/F	/F
$\chi_9^{(35)}$	E	-/G	/G	-B	B	-C	C	-/E	-1	-/B	/B	-F	F	-/E	/E
$\chi_9^{(36)}$	D	-/E	/E	-A	A	-C	C	-/D	-1	-/A	/A	-G	G	-/D	/D
$\chi_9^{(37)}$	-/D	E	E	-/A	-/A	-/C	-/C	-D	1	A	A	/G	/G	D	D
$\chi_9^{(38)}$	-/E	G	G	-/B	-/B	-/C	-/C	-E	1	B	B	/F	/F	E	E
$\chi_9^{(39)}$	-/F	D	D	-B	-B	-/C	-/C	-F	1	/B	/B	/E	/E	F	F
$\chi_9^{(40)}$	-/G	F	F	-A	-A	-/C	-/C	-G	1	/A	/A	/D	/D	G	G
$\chi_9^{(41)}$	-G	/F	/F	-/A	-/A	-C	-C	-/G	1	A	A	D	D	/G	/G
$\chi_9^{(42)}$	-F	/D	/D	-/B	-/B	-C	-C	-/F	1	B	B	E	E	/F	/F
$\chi_9^{(43)}$	-E	/G	/G	-B	-B	-C	-C	-/E	1	/B	/B	F	F	/E	/E
$\chi_9^{(44)}$	-D	/E	/E	-A	-A	-C	-C	-/D	1	/A	/A	G	G	/D	/D
$\chi_9^{(45)}$	/D	E	-E	-/A	/A	-/C	/C	-D	-1	A	-A	/G	-/G	D	-D
$\chi_9^{(46)}$	/E	G	-G	-/B	/B	-/C	/C	-E	-1	B	-B	/F	-/F	E	-E
$\chi_9^{(47)}$	/F	D	-D	-B	B	-/C	/C	-F	-1	/B	-/B	/E	-/E	F	-F
$\chi_9^{(48)}$	/G	F	-F	-A	A	-/C	/C	-G	-1	/A	-/A	/D	-/D	G	-G
$\chi_9^{(49)}$	G	/F	-/F	-/A	/A	-C	C	-/G	-1	A	-A	D	-D	/G	-/G
$\chi_9^{(50)}$	F	/D	-/D	-/B	/B	-C	C	-/F	-1	B	-B	E	-E	/F	-/F
$\chi_9^{(51)}$	E	/G	-/G	-B	B	-C	C	-/E	-1	/B	-/B	F	-F	/E	-/E
$\chi_9^{(52)}$	D	/E	-/E	-A	A	-C	C	-/D	-1	/A	-/A	G	-G	/D	-/D
$\chi_9^{(53)}$	-/D	-E	-E	-/A	-/A	-/C	-/C	-D	1	-A	-A	-/G	-/G	-D	-D
$\chi_9^{(54)}$	-/E	-G	-G	-/B	-/B	-/C	-/C	-E	1	-B	-B	-/F	-/F	-E	-E
$\chi_9^{(55)}$	-/F	-D	-D	-B	-B	-/C	-/C	-F	1	-/B	-/B	-/E	-/E	-F	-F
$\chi_9^{(56)}$	-/G	-F	-F	-A	-A	-/C	-/C	-G	1	-/A	-/A	-/D	-/D	-G	-G
$\chi_9^{(57)}$	-G	-/F	-/F	-/A	-/A	-C	-C	-/G	1	-A	-A	-D	-D	-/G	-/G
$\chi_9^{(58)}$	-F	-/D	-/D	-/B	-/B	-C	-C	-/F	1	-B	-B	-E	-E	-/F	-/F
$\chi_9^{(59)}$	-E	-/G	-/G	-B	-B	-C	-C	-/E	1	-/B	-/B	-F	-F	-/E	-/E
$\chi_9^{(60)}$	-D	-/E	-/E	-A	-A	-C	-C	-/D	1	-/A	-/A	-G	-G	-/D	-/D

where $A = -E(5)^3, B = -E(5), C = -E(3) = (1 - ER(-3))/2 = -b3, D = -E(15)^{14}, E = -E(15)^8, F = -E(15)^2, G = -E(15)^{11}$.

The generators of $G^{s_{10}}$ are:

$$\begin{pmatrix} -1 & 1 & 0 & 1 & -2 & 1 & -1 & 1 \\ -1 & 1 & -1 & 2 & -2 & 0 & -1 & 2 \\ -2 & 2 & 0 & 2 & -3 & 0 & -1 & 2 \\ -3 & 2 & 0 & 3 & -4 & 0 & -2 & 4 \\ -3 & 2 & 0 & 2 & -3 & 0 & -1 & 3 \\ -2 & 2 & 0 & 1 & -2 & 0 & -1 & 2 \\ -1 & 2 & 0 & 0 & -1 & 0 & -1 & 2 \\ -1 & 1 & 0 & 0 & 0 & 0 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 0 & 0 & -1 & 0 & 2 & 0 \\ 0 & 1 & 1 & -1 & -2 & 1 & 2 & 0 \\ 0 & 0 & 1 & -1 & -2 & 1 & 3 & 0 \\ 0 & 1 & 1 & -1 & -4 & 2 & 4 & 0 \\ 0 & 0 & 1 & 0 & -4 & 2 & 3 & 0 \\ 0 & 0 & 1 & 0 & -3 & 1 & 2 & 1 \\ 0 & 0 & 1 & 0 & -2 & 0 & 2 & 0 \\ 1 & 0 & 0 & 0 & -1 & 0 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 & -1 & 2 & -2 & 0 & 0 & 1 \\ 1 & 0 & -1 & 2 & -3 & 1 & -1 & 2 \\ 1 & 0 & -1 & 3 & -4 & 0 & 0 & 2 \\ 1 & 0 & -1 & 4 & -6 & 1 & -1 & 3 \\ 1 & 0 & -1 & 3 & -5 & 1 & 0 & 2 \\ 1 & 0 & -1 & 2 & -3 & 0 & 0 & 2 \\ 1 & 1 & -1 & 1 & -2 & 0 & 0 & 1 \\ 1 & 0 & -1 & 1 & -1 & 0 & 0 & 0 \end{pmatrix}.$$

The representatives of conjugacy classes of $G^{s_{10}}$ are:

$$\begin{pmatrix} 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} -2 & -1 & 1 & 1 & -1 & 1 & 0 & -1 \\ -2 & -2 & 1 & 2 & -2 & 1 & 1 & -2 \\ -3 & -2 & 1 & 3 & -3 & 2 & 0 & -2 \\ -4 & -3 & 2 & 4 & -5 & 3 & 1 & -3 \\ -3 & -2 & 1 & 3 & -4 & 3 & 1 & -3 \\ -3 & -1 & 1 & 2 & -3 & 2 & 1 & -2 \\ -2 & -1 & 1 & 1 & -2 & 2 & 0 & -1 \\ -1 & 0 & 1 & 0 & -1 & 1 & 0 & -1 \end{pmatrix}, \begin{pmatrix} -1 & -2 & 0 & 2 & -1 & 0 & 1 & -1 \\ -2 & -3 & 1 & 2 & -1 & 0 & 1 & 0 \\ -2 & -4 & 0 & 4 & -2 & 0 & 1 & 0 \\ -4 & -5 & 1 & 5 & -3 & 0 & 2 & 0 \\ -3 & -4 & 0 & 4 & -2 & 0 & 2 & 0 \\ -2 & -3 & 0 & 3 & -2 & 0 & 2 & 0 \\ -2 & -2 & 0 & 2 & -1 & 0 & 1 & 0 \\ -1 & -1 & 0 & 1 & 0 & -1 & 1 & 0 \end{pmatrix},$$

$$\begin{pmatrix} -1 & -2 & 0 & 2 & -1 & 0 & 1 & -1 \\ -1 & -3 & 1 & 2 & -2 & 1 & 1 & -1 \\ -1 & -4 & 0 & 4 & -3 & 1 & 1 & -1 \\ -2 & -5 & 1 & 5 & -5 & 2 & 2 & -2 \\ -1 & -4 & 0 & 4 & -4 & 2 & 2 & -2 \\ -1 & -3 & 0 & 3 & -3 & 1 & 2 & -1 \\ -1 & -2 & 0 & 2 & -2 & 1 & 1 & -1 \\ 0 & -1 & 0 & 1 & -1 & 0 & 1 & -1 \end{pmatrix}, \begin{pmatrix} -1 & -2 & 1 & 1 & -1 & 1 & 0 & 0 \\ -3 & -2 & 2 & 1 & -1 & 1 & 0 & 0 \\ -3 & -3 & 2 & 2 & -2 & 2 & -1 & 1 \\ -5 & -4 & 3 & 3 & -3 & 2 & 0 & 1 \\ -4 & -3 & 2 & 2 & -2 & 2 & 0 & 1 \\ -3 & -2 & 2 & 1 & -2 & 2 & 0 & 1 \\ -2 & -2 & 1 & 1 & -1 & 1 & 0 & 1 \\ -1 & -1 & 1 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} -1 & -2 & 1 & 1 & -1 & 1 & 0 & 0 \\ -2 & -2 & 2 & 1 & -2 & 2 & 0 & -1 \\ -2 & -3 & 2 & 2 & -3 & 3 & -1 & 0 \\ -3 & -4 & 3 & 3 & -5 & 4 & 0 & -1 \\ -2 & -3 & 2 & 2 & -4 & 4 & 0 & -1 \\ -2 & -2 & 2 & 1 & -3 & 3 & 0 & 0 \\ -1 & -2 & 1 & 1 & -2 & 2 & 0 & 0 \\ 0 & -1 & 1 & 0 & -1 & 1 & 0 & 0 \end{pmatrix},$$

$$\begin{pmatrix} -1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ -1 & -1 & 0 & 0 & 1 & -1 & 0 & 1 \\ -1 & 0 & -1 & 0 & 1 & -1 & 0 & 1 \\ -2 & 0 & 0 & -1 & 2 & -2 & 0 & 2 \\ -2 & 0 & 0 & 0 & 1 & -2 & 0 & 2 \\ -1 & 0 & 0 & 0 & 1 & -2 & 0 & 1 \\ -1 & 0 & 0 & 0 & 1 & -1 & -1 & 1 \\ -1 & 0 & 0 & 0 & 1 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & -1 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & -1 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & -1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & -1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & -1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & -1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 1 & -1 & 0 & 1 & -1 & 1 \\ -2 & 0 & 1 & -1 & 1 & 0 & -1 & 1 \\ -2 & 1 & 1 & -2 & 1 & 1 & -2 & 2 \\ -3 & 1 & 2 & -3 & 2 & 0 & -2 & 3 \\ -3 & 1 & 2 & -2 & 1 & 0 & -2 & 3 \\ -2 & 1 & 2 & -2 & 1 & 0 & -2 & 2 \\ -1 & 0 & 1 & -1 & 1 & 0 & -2 & 2 \\ -1 & 0 & 1 & -1 & 1 & 0 & -1 & 1 \end{pmatrix},$$

$$\begin{pmatrix} -1 & 0 & 1 & -1 & 0 & 1 & -1 & 1 \\ -1 & 0 & 1 & -1 & 0 & 1 & -1 & 0 \\ -1 & 1 & 1 & -2 & 0 & 2 & -2 & 1 \\ -1 & 1 & 2 & -3 & 0 & 2 & -2 & 1 \\ -1 & 1 & 2 & -2 & -1 & 2 & -2 & 1 \\ -1 & 1 & 2 & -2 & 0 & 1 & -2 & 1 \\ 0 & 0 & 1 & -1 & 0 & 1 & -2 & 1 \\ 0 & 0 & 1 & -1 & 0 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 1 & 0 & 0 & -1 & 0 & 2 & -1 \\ -1 & 1 & 0 & 0 & -1 & -1 & 3 & 0 \\ -2 & 1 & 0 & 0 & -1 & -1 & 4 & -1 \\ -3 & 2 & 0 & 0 & -2 & -1 & 5 & 0 \\ -3 & 1 & 0 & 1 & -2 & -1 & 4 & 0 \\ -2 & 1 & 0 & 1 & -2 & -1 & 3 & 0 \\ -2 & 1 & 1 & 0 & -1 & -1 & 2 & 0 \\ -1 & 1 & 0 & 0 & 0 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 1 & 0 & 0 & -1 & 0 & 2 & -1 \\ 0 & 1 & 0 & 0 & -2 & 0 & 3 & -1 \\ -1 & 1 & 0 & 0 & -2 & 0 & 4 & -2 \\ -1 & 2 & 0 & 0 & -4 & 1 & 5 & -2 \\ -1 & 1 & 0 & 1 & -4 & 1 & 4 & -2 \\ -1 & 1 & 0 & 1 & -3 & 0 & 3 & -1 \\ -1 & 1 & 1 & 0 & -2 & 0 & 2 & -1 \\ 0 & 1 & 0 & 0 & -1 & 0 & 1 & -1 \end{pmatrix},$$

$$\begin{pmatrix} 1 & -1 & -2 & 1 & 0 & 1 & 0 & 0 \\ 0 & -1 & -2 & 1 & 0 & 2 & -1 & 1 \\ 1 & -1 & -3 & 1 & 0 & 2 & 0 & 1 \\ 0 & -2 & -4 & 2 & 0 & 3 & 0 & 1 \\ 0 & -2 & -3 & 2 & 0 & 2 & 0 & 1 \\ 0 & -2 & -2 & 2 & -1 & 2 & 0 & 1 \\ 0 & -1 & -2 & 2 & -1 & 1 & 0 & 1 \\ 0 & -1 & -1 & 1 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 1 & -1 & -2 & 1 & 0 & 1 & 0 & 0 \\ 1 & -1 & -2 & 1 & -1 & 3 & -1 & 0 \\ 2 & -1 & -3 & 1 & -1 & 3 & 0 & 0 \\ 2 & -2 & -4 & 2 & -2 & 5 & 0 & -1 \\ 2 & -2 & -3 & 2 & -2 & 4 & 0 & -1 \\ 1 & -2 & -2 & 2 & -2 & 3 & 0 & 0 \\ 1 & -1 & -2 & 2 & -2 & 2 & 0 & 0 \\ 1 & -1 & -1 & 1 & -1 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & -1 & -1 & 1 & 1 & -1 & -1 & 0 \\ 1 & -2 & -1 & 1 & 2 & -1 & -2 & 1 \\ 2 & -2 & -2 & 2 & 2 & -2 & -2 & 1 \\ 2 & -3 & -2 & 2 & 4 & -3 & -3 & 1 \\ 2 & -2 & -2 & 1 & 4 & -3 & -2 & 1 \\ 2 & -2 & -2 & 1 & 3 & -2 & -1 & 0 \\ 1 & -1 & -2 & 1 & 2 & -1 & -1 & 0 \\ 0 & -1 & -1 & 1 & 1 & -1 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 1 & -1 & -1 & 1 & 1 & -1 & -1 & 0 \\ 2 & -2 & -1 & 1 & 1 & 0 & -2 & 0 \\ 3 & -2 & -2 & 2 & 1 & -1 & -2 & 0 \\ 4 & -3 & -2 & 2 & 2 & -1 & -3 & -1 \\ 4 & -2 & -2 & 1 & 2 & -1 & -2 & -1 \\ 3 & -2 & -2 & 1 & 2 & -1 & -1 & -1 \\ 2 & -1 & -2 & 1 & 1 & 0 & -1 & -1 \\ 1 & -1 & -1 & 1 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 1 & -1 & 0 & -1 & 2 & -1 & 1 & -1 \\ 0 & -1 & 1 & -2 & 3 & -1 & 1 & -1 \\ 1 & -2 & 0 & -2 & 4 & -1 & 1 & -1 \\ 1 & -2 & 0 & -3 & 6 & -2 & 2 & -2 \\ 1 & -2 & 0 & -2 & 5 & -2 & 1 & -1 \\ 1 & -2 & 0 & -1 & 3 & -1 & 1 & -1 \\ 0 & -2 & 0 & 0 & 2 & -1 & 1 & -1 \\ 0 & -1 & 0 & 0 & 1 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & -1 & 0 & -1 & 2 & -1 & 1 & -1 \\ 1 & -1 & 1 & -2 & 2 & 0 & 1 & -2 \\ 2 & -2 & 0 & -2 & 3 & 0 & 1 & -2 \\ 3 & -2 & 0 & -3 & 4 & 0 & 2 & -4 \\ 3 & -2 & 0 & -2 & 3 & 0 & 1 & -3 \\ 2 & -2 & 0 & -1 & 2 & 0 & 1 & -2 \\ 1 & -2 & 0 & 0 & 1 & 0 & 1 & -2 \\ 1 & -1 & 0 & 0 & 0 & 0 & 1 & -1 \end{pmatrix}, \\
\begin{pmatrix} 1 & -1 & 0 & 0 & 1 & 0 & -2 & 1 \\ 0 & -1 & 0 & 0 & 2 & 0 & -3 & 1 \\ 1 & -1 & 0 & 0 & 2 & 0 & -4 & 2 \\ 1 & -2 & 0 & 0 & 4 & -1 & -5 & 2 \\ 1 & -1 & 0 & -1 & 4 & -1 & -4 & 2 \\ 1 & -1 & 0 & -1 & 3 & 0 & -3 & 1 \\ 1 & -1 & -1 & 0 & 2 & 0 & -2 & 1 \\ 0 & -1 & 0 & 0 & 1 & 0 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 1 & -1 & 0 & 0 & 1 & 0 & -2 & 1 \\ 1 & -1 & 0 & 0 & 1 & 1 & -3 & 0 \\ 2 & -1 & 0 & 0 & 1 & 1 & -4 & 1 \\ 3 & -2 & 0 & 0 & 2 & 1 & -5 & 0 \\ 3 & -1 & 0 & -1 & 2 & 1 & -4 & 0 \\ 2 & -1 & 0 & -1 & 2 & 1 & -3 & 0 \\ 2 & -1 & -1 & 0 & 1 & 1 & -2 & 0 \\ 1 & -1 & 0 & 0 & 0 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & -1 & 1 & 0 & -1 & 1 & -1 \\ 1 & 0 & -1 & 1 & 0 & -1 & 1 & 0 \\ 1 & -1 & -1 & 2 & 0 & -2 & 2 & -1 \\ 1 & -1 & -2 & 3 & 0 & -2 & 2 & -1 \\ 1 & -1 & -2 & 2 & 1 & -2 & 2 & -1 \\ 1 & -1 & -2 & 2 & 0 & -1 & 2 & -1 \\ 0 & 0 & -1 & 1 & 0 & -1 & 2 & -1 \\ 0 & 0 & -1 & 1 & 0 & -1 & 1 & 0 \end{pmatrix}, \\
\begin{pmatrix} 1 & 0 & -1 & 1 & 0 & -1 & 1 & -1 \\ 2 & 0 & -1 & 1 & -1 & 0 & 1 & -1 \\ 2 & -1 & -1 & 2 & -1 & -1 & 2 & -2 \\ 3 & -1 & -2 & 3 & -2 & 0 & 2 & -3 \\ 3 & -1 & -2 & 2 & -1 & 0 & 2 & -3 \\ 2 & -1 & -2 & 2 & -1 & 0 & 2 & -2 \\ 1 & 0 & -1 & 1 & -1 & 0 & 2 & -2 \\ 1 & 0 & -1 & 1 & -1 & 0 & 1 & -1 \end{pmatrix}, \begin{pmatrix} -2 & -1 & 1 & 1 & -1 & 1 & 0 & -1 \\ -3 & -2 & 1 & 2 & -1 & 0 & 1 & -1 \\ -4 & -2 & 1 & 3 & -2 & 1 & 0 & -1 \\ -6 & -3 & 2 & 4 & -3 & 1 & 1 & -1 \\ -5 & -2 & 1 & 3 & -2 & 1 & 1 & -1 \\ -4 & -1 & 1 & 2 & -2 & 1 & 1 & -1 \\ -3 & -1 & 1 & 1 & -1 & 1 & 0 & 0 \\ -2 & 0 & 1 & 0 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 1 & 1 & 0 & 0 & -1 & 1 & 0 & -1 \\ 1 & 0 & 1 & 0 & -1 & 1 & 0 & -1 \\ 2 & 0 & 0 & 1 & -2 & 2 & 0 & -2 \\ 2 & 0 & 0 & 0 & -1 & 2 & 0 & -2 \\ 1 & 0 & 0 & 0 & -1 & 2 & 0 & -1 \\ 1 & 0 & 0 & 0 & -1 & 1 & 1 & -1 \\ 1 & 0 & 0 & 0 & -1 & 1 & 0 & 0 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} 1 & 2 & -1 & -1 & 1 & -1 & 0 & 0 \\ 2 & 2 & -2 & -1 & 2 & -2 & 0 & 1 \\ 2 & 3 & -2 & -2 & 3 & -3 & 1 & 0 \\ 3 & 4 & -3 & -3 & 5 & -4 & 0 & 1 \\ 2 & 3 & -2 & -2 & 4 & -4 & 0 & 1 \\ 2 & 2 & -2 & -1 & 3 & -3 & 0 & 0 \\ 1 & 2 & -1 & -1 & 2 & -2 & 0 & 0 \\ 0 & 1 & -1 & 0 & 1 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 2 & -1 & -1 & 1 & -1 & 0 & 0 \\ 3 & 2 & -2 & -1 & 1 & -1 & 0 & 0 \\ 3 & 3 & -2 & -2 & 2 & -2 & 1 & -1 \\ 5 & 4 & -3 & -3 & 3 & -2 & 0 & -1 \\ 4 & 3 & -2 & -2 & 2 & -2 & 0 & -1 \\ 3 & 2 & -2 & -1 & 2 & -2 & 0 & -1 \\ 2 & 2 & -1 & -1 & 1 & -1 & 0 & -1 \\ 1 & 1 & -1 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 1 & 2 & 0 & -2 & 1 & 0 & -1 & 1 \\ 1 & 3 & -1 & -2 & 2 & -1 & -1 & 1 \\ 1 & 4 & 0 & -4 & 3 & -1 & -1 & 1 \\ 2 & 5 & -1 & -5 & 5 & -2 & -2 & 2 \\ 1 & 4 & 0 & -4 & 4 & -2 & -2 & 2 \\ 1 & 3 & 0 & -3 & 3 & -1 & -2 & 1 \\ 1 & 2 & 0 & -2 & 2 & -1 & -1 & 1 \\ 0 & 1 & 0 & -1 & 1 & 0 & -1 & 1 \end{pmatrix}, \\
\begin{pmatrix} 1 & 2 & 0 & -2 & 1 & 0 & -1 & 1 \\ 2 & 3 & -1 & -2 & 1 & 0 & -1 & 0 \\ 2 & 4 & 0 & -4 & 2 & 0 & -1 & 0 \\ 4 & 5 & -1 & -5 & 3 & 0 & -2 & 0 \\ 3 & 4 & 0 & -4 & 2 & 0 & -2 & 0 \\ 2 & 3 & 0 & -3 & 2 & 0 & -2 & 0 \\ 2 & 2 & 0 & -2 & 1 & 0 & -1 & 0 \\ 1 & 1 & 0 & -1 & 0 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 2 & 1 & -1 & -1 & 1 & -1 & 0 & 1 \\ 2 & 2 & -1 & -2 & 2 & -1 & -1 & 2 \\ 3 & 2 & -1 & -3 & 3 & -2 & 0 & 2 \\ 4 & 3 & -2 & -4 & 5 & -3 & -1 & 3 \\ 3 & 2 & -1 & -3 & 4 & -3 & -1 & 3 \\ 3 & 1 & -1 & -2 & 3 & -2 & -1 & 2 \\ 2 & 1 & -1 & -1 & 2 & -2 & 0 & 1 \\ 1 & 0 & -1 & 0 & 1 & -1 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 2 & 1 & -1 & -1 & 1 & -1 & 0 & 1 \\ 3 & 2 & -1 & -2 & 1 & 0 & -1 & 1 \\ 4 & 2 & -1 & -3 & 2 & -1 & 0 & 1 \\ 6 & 3 & -2 & -4 & 3 & -1 & -1 & 1 \\ 5 & 2 & -1 & -3 & 2 & -1 & -1 & 1 \\ 4 & 1 & -1 & -2 & 2 & -1 & -1 & 1 \\ 3 & 1 & -1 & -1 & 1 & -1 & 0 & 0 \\ 2 & 0 & -1 & 0 & 0 & 0 & 0 & 0 \end{pmatrix}.$$

The character table of $G^{s_{10}}$:

	10										20									
$\chi_{10}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{10}^{(2)}$	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1
$\chi_{10}^{(3)}$	1	1	1	1	1	-1	-1	-1	-1	-1	-1	1	1	-1	-1	1	1	-1	-1	-1
$\chi_{10}^{(4)}$	1	-1	1	-1	1	-1	1	-1	1	-1	1	1	-1	-1	1	1	-1	-1	1	-1
$\chi_{10}^{(5)}$	1	A	-A	A	-A	A	1	-1	1	-1	-/A	/A	-B	B	-/A	/A	-/B	/B	1	-1
$\chi_{10}^{(6)}$	1	B	-B	B	-B	B	1	-1	1	-1	-/B	/B	-/A	/A	-/B	/B	-A	A	1	-1
$\chi_{10}^{(7)}$	1	/B	-/B	/B	-/B	/B	1	-1	1	-1	-B	B	-A	A	-B	B	-/A	/A	1	-1
$\chi_{10}^{(8)}$	1	/A	-/A	/A	-/A	/A	1	-1	1	-1	-A	A	-/B	/B	-A	A	-B	B	1	-1
$\chi_{10}^{(9)}$	1	-A	-A	-A	-A	-A	-1	-1	-1	-1	/A	/A	-B	-B	/A	/A	-/B	-/B	-1	-1
$\chi_{10}^{(10)}$	1	-B	-B	-B	-B	-B	-1	-1	-1	-1	/B	/B	-/A	-/A	/B	/B	-A	-A	-1	-1
$\chi_{10}^{(11)}$	1	-/B	-/B	-/B	-/B	-/B	-1	-1	-1	-1	B	B	-A	-A	B	B	-/A	-/A	-1	-1
$\chi_{10}^{(12)}$	1	-/A	-/A	-/A	-/A	-/A	-1	-1	-1	-1	A	A	-/B	-/B	A	A	-B	-B	-1	-1
$\chi_{10}^{(13)}$	1	A	-A	A	-A	A	-1	1	-1	1	/A	-/A	-B	B	/A	-/A	-/B	/B	-1	1
$\chi_{10}^{(14)}$	1	B	-B	B	-B	B	-1	1	-1	1	/B	-/B	-/A	/A	/B	-/B	-A	A	-1	1
$\chi_{10}^{(15)}$	1	/B	-/B	/B	-/B	/B	-1	1	-1	1	B	-B	-A	A	B	-B	-/A	/A	-1	1
$\chi_{10}^{(16)}$	1	/A	-/A	/A	-/A	/A	-1	1	-1	1	A	-A	-/B	/B	A	-A	-B	B	-1	1
$\chi_{10}^{(17)}$	1	-A	-A	-A	-A	-A	1	1	1	1	-/A	-/A	-B	-B	-/A	-/A	-/B	-/B	1	1
$\chi_{10}^{(18)}$	1	-B	-B	-B	-B	-B	1	1	1	1	-/B	-/B	-/A	-/A	-/B	-/B	-A	-A	1	1
$\chi_{10}^{(19)}$	1	-/B	-/B	-/B	-/B	-/B	1	1	1	1	-B	-B	-A	-A	-B	-B	-/A	-/A	1	1
$\chi_{10}^{(20)}$	1	-/A	-/A	-/A	-/A	-/A	1	1	1	1	-A	-A	-/B	-/B	-A	-A	-B	-B	1	1
$\chi_{10}^{(21)}$	1	C	-/C	/C	1	-1	1	-1	-/C	/C	1	-1	-C	C	-/C	/C	-C	C	-C	C
$\chi_{10}^{(22)}$	1	/C	-C	C	1	-1	1	-1	-C	C	1	-1	-/C	/C	-C	C	-/C	/C	-/C	/C
$\chi_{10}^{(23)}$	1	-C	-/C	-/C	1	1	-1	-1	/C	/C	-1	-1	-C	-C	/C	/C	-C	-C	C	C
$\chi_{10}^{(24)}$	1	-/C	-C	-C	1	1	-1	-1	C	C	-1	-1	-/C	-/C	C	C	-/C	-/C	/C	/C
$\chi_{10}^{(25)}$	1	C	-/C	/C	1	-1	-1	1	/C	-/C	-1	1	-C	C	/C	-/C	-C	C	C	-C
$\chi_{10}^{(26)}$	1	/C	-C	C	1	-1	-1	1	C	-C	-1	1	-/C	/C	C	-C	-/C	/C	/C	-/C
$\chi_{10}^{(27)}$	1	-C	-/C	-/C	1	1	1	1	-/C	-/C	1	1	-C	-C	-/C	-/C	-C	-C	-C	-C
$\chi_{10}^{(28)}$	1	-/C	-C	-C	1	1	1	1	-C	-C	1	1	-/C	-/C	-C	-C	-/C	-/C	-/C	-/C
$\chi_{10}^{(29)}$	1	D	-/G	/G	-A	A	1	-1	-/C	/C	-/A	/A	-E	E	-/D	/D	-F	F	-C	C
$\chi_{10}^{(30)}$	1	E	-/F	/F	-B	B	1	-1	-/C	/C	-/B	/B	-G	G	-/E	/E	-D	D	-C	C
$\chi_{10}^{(31)}$	1	F	-/E	/E	-/B	/B	1	-1	-/C	/C	-B	B	-D	D	-/F	/F	-G	G	-C	C
$\chi_{10}^{(32)}$	1	G	-/D	/D	-/A	/A	1	-1	-/C	/C	-A	A	-F	F	-/G	/G	-E	E	-C	C
$\chi_{10}^{(33)}$	1	/G	-D	D	-A	A	1	-1	-C	C	-/A	/A	-/F	/F	-G	G	-/E	/E	-/C	/C
$\chi_{10}^{(34)}$	1	/F	-E	E	-B	B	1	-1	-C	C	-/B	/B	-/D	/D	-F	F	-/G	/G	-/C	/C
$\chi_{10}^{(35)}$	1	/E	-F	F	-/B	/B	1	-1	-C	C	-B	B	-/G	/G	-E	E	-/D	/D	-/C	/C
$\chi_{10}^{(36)}$	1	/D	-G	G	-/A	/A	1	-1	-C	C	-A	A	-/E	/E	-D	D	-/F	/F	-/C	/C
$\chi_{10}^{(37)}$	1	-D	-/G	-/G	-A	-A	-1	-1	/C	/C	/A	/A	-E	-E	/D	/D	-F	-F	C	C
$\chi_{10}^{(38)}$	1	-E	-/F	-/F	-B	-B	-1	-1	/C	/C	/B	/B	-G	-G	/E	/E	-D	-D	C	C
$\chi_{10}^{(39)}$	1	-F	-/E	-/E	-/B	-/B	-1	-1	/C	/C	B	B	-D	-D	/F	/F	-G	-G	C	C
$\chi_{10}^{(40)}$	1	-G	-/D	-/D	-/A	-/A	-1	-1	/C	/C	A	A	-F	-F	/G	/G	-E	-E	C	C
$\chi_{10}^{(41)}$	1	-/G	-D	-D	-A	-A	-1	-1	C	C	/A	/A	-/F	-/F	G	G	-/E	-/E	/C	/C
$\chi_{10}^{(42)}$	1	-/F	-E	-E	-B	-B	-1	-1	C	C	/B	/B	-/D	-/D	F	F	-/G	-/G	/C	/C
$\chi_{10}^{(43)}$	1	-/E	-F	-F	-/B	-/B	-1	-1	C	C	B	B	-/G	-/G	E	E	-/D	-/D	/C	/C
$\chi_{10}^{(44)}$	1	-/D	-G	-G	-/A	-/A	-1	-1	C	C	A	A	-/E	-/E	D	D	-/F	-/F	/C	/C
$\chi_{10}^{(45)}$	1	D	-/G	/G	-A	A	-1	1	/C	-/C	/A	-/A	-E	E	/D	-/D	-F	F	C	-C

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$\chi_{10}^{(46)}$	1	E	-/F	/F	-B	B	-1	1	/C	-/C	/B	-/B	-G	G	/E	-/E	-D	D	C	-C	A	-A	/G	
$\chi_{10}^{(47)}$	1	F	-/E	/E	-/B	/B	-1	1	/C	-/C	B	-B	-D	D	/F	-/F	-G	G	C	-C	/A	-/A	/D	
$\chi_{10}^{(48)}$	1	G	-/D	/D	-/A	/A	-1	1	/C	-/C	A	-A	-F	F	/G	-/G	-E	E	C	-C	B	-B	/F	
$\chi_{10}^{(49)}$	1	/G	-D	D	-A	A	-1	1	C	-C	/A	-/A	-/F	/F	G	-G	-/E	/E	/C	-/C	/B	-/B	F	
$\chi_{10}^{(50)}$	1	/F	-E	E	-B	B	-1	1	C	-C	/B	-/B	-/D	/D	F	-F	-/G	/G	/C	-/C	A	-A	D	
$\chi_{10}^{(51)}$	1	/E	-F	F	-/B	/B	-1	1	C	-C	B	-B	-/G	/G	E	-E	-/D	/D	/C	-/C	/A	-/A	G	
$\chi_{10}^{(52)}$	1	/D	-G	G	-/A	/A	-1	1	C	-C	A	-A	-/E	/E	D	-D	-/F	/F	/C	-/C	B	-B	E	
$\chi_{10}^{(53)}$	1	-D	-/G	-/G	-A	-A	1	1	-/C	-/C	-/A	-/A	-E	-E	-/D	-/D	-F	-F	-C	-C	-/B	-/B	-/E	
$\chi_{10}^{(54)}$	1	-E	-/F	-/F	-B	-B	1	1	-/C	-/C	-/B	-/B	-G	-G	-/E	-/E	-D	-D	-C	-C	-A	-A	-/G	
$\chi_{10}^{(55)}$	1	-F	-/E	-/E	-/B	-/B	1	1	-/C	-/C	-B	-B	-D	-D	-/F	-/F	-G	-G	-C	-C	-/A	-/A	-/D	
$\chi_{10}^{(56)}$	1	-G	-/D	-/D	-/A	-/A	1	1	-/C	-/C	-A	-A	-F	-F	-/G	-/G	-E	-E	-C	-C	-B	-B	-/F	
$\chi_{10}^{(57)}$	1	-/G	-D	-D	-A	-A	1	1	-C	-C	-/A	-/A	-/F	-/F	-G	-G	-/E	-/E	-/C	-/C	-/B	-/B	-F	
$\chi_{10}^{(58)}$	1	-/F	-E	-E	-B	-B	1	1	-C	-C	-/B	-/B	-/D	-/D	-F	-F	-/G	-/G	-/C	-/C	-A	-A	-D	
$\chi_{10}^{(59)}$	1	-/E	-F	-F	-/B	-/B	1	1	-C	-C	-B	-B	-/G	-/G	-E	-E	-/D	-/D	-/C	-/C	-/A	-/A	-G	
$\chi_{10}^{(60)}$	1	-/D	-G	-G	-/A	-/A	1	1	-C	-C	-A	-A	-/E	-/E	-D	-D	-/F	-/F	-/C	-/C	-B	-B	-E	
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$\chi_{10}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
$\chi_{10}^{(2)}$	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1		
$\chi_{10}^{(3)}$	-1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	1	1	1	1	1	1	-1	-1	1		
$\chi_{10}^{(4)}$	1	1	-1	-1	1	-1	1	1	-1	1	-1	-1	1	1	-1	1	-1	1	-1	-1	1	1		
$\chi_{10}^{(5)}$	/B	-B	B	-B	B	-/A	/A	-/A	/A	-B	B	-B	B	-/B	/B	-/B	/B	1	-1	-/B	/B	-/A		
$\chi_{10}^{(6)}$	A	-/A	/A	-/A	/A	-/B	/B	-/B	/B	-/A	/A	-/A	/A	-A	A	-A	A	1	-1	-A	A	-/B		
$\chi_{10}^{(7)}$	/A	-A	A	-A	A	-B	B	-B	B	-A	A	-A	A	-/A	/A	-/A	/A	1	-1	-/A	/A	-B		
$\chi_{10}^{(8)}$	B	-/B	/B	-/B	/B	-A	A	-A	A	-/B	/B	-/B	/B	-B	B	-B	B	1	-1	-B	B	-A		
$\chi_{10}^{(9)}$	/B	-B	-B	B	B	/A	/A	-/A	-/A	-B	-B	B	B	-/B	-/B	-/B	-/B	1	1	/B	/B	-/A		
$\chi_{10}^{(10)}$	A	-/A	-/A	/A	/A	/B	/B	-/B	-/B	-/A	-/A	/A	/A	-A	-A	-A	-A	1	1	A	A	-/B		
$\chi_{10}^{(11)}$	/A	-A	-A	A	A	B	B	-B	-B	-A	-A	A	A	-/A	-/A	-/A	-/A	1	1	/A	/A	-B		
$\chi_{10}^{(12)}$	B	-/B	-/B	/B	/B	A	A	-A	-A	-/B	-/B	/B	/B	-B	-B	-B	-B	1	1	B	B	-A		
$\chi_{10}^{(13)}$	-/B	-B	B	B	-B	/A	-/A	-/A	/A	-B	B	B	-B	-/B	/B	-/B	/B	1	-1	/B	-/B	-/A		
$\chi_{10}^{(14)}$	-A	-/A	/A	/A	-/A	/B	-/B	-/B	/B	-/A	/A	/A	-/A	-A	A	-A	A	1	-1	A	-A	-/B		
$\chi_{10}^{(15)}$	-/A	-A	A	A	-A	B	-B	-B	B	-A	A	A	-A	-/A	/A	-/A	/A	1	-1	/A	-/A	-B		
$\chi_{10}^{(16)}$	-B	-/B	/B	/B	-/B	A	-A	-A	A	-/B	/B	/B	-/B	-B	B	-B	B	1	-1	B	-B	-A		
$\chi_{10}^{(17)}$	-/B	-B	-B	-B	-B	-/A	-/A	-/A	-/A	-B	-B	-B	-B	-/B	-/B	-/B	-/B	1	1	-/B	-/B	-/A		
$\chi_{10}^{(18)}$	-A	-/A	-/A	-/A	-/A	-/B	-/B	-/B	-/B	-/A	-/A	-/A	-/A	-A	-A	-A	-A	1	1	-A	-A	-/B		
$\chi_{10}^{(19)}$	-/A	-A	-A	-A	-A	-B	-B	-B	-B	-A	-A	-A	-A	-/A	-/A	-/A	-/A	1	1	-/A	-/A	-B		
$\chi_{10}^{(20)}$	-B	-/B	-/B	-/B	-/B	-A	-A	-A	-A	-/B	-/B	-/B	-/B	-B	-B	-B	-B	1	1	-B	-B	-A		
$\chi_{10}^{(21)}$	/C	-/C	/C	1	-1	-C	C	-C	C	1	-1	-/C	/C	-/C	/C	1	-1	-C	C	-C	C	-/C		
$\chi_{10}^{(22)}$	C	-C	C	1	-1	-/C	/C	-/C	/C	1	-1	-C	C	-C	C	1	-1	-/C	/C	-/C	/C	-C		
$\chi_{10}^{(23)}$	/C	-/C	-/C	-1	-1	C	C	-C	-C	1	1	/C	/C	-/C	-/C	1	1	-C	-C	C	C	-/C		
$\chi_{10}^{(24)}$	C	-C	-C	-1	-1	/C	/C	-/C	-/C	1	1	C	C	-C	-C	1	1	-/C	-/C	/C	/C	-C		
$\chi_{10}^{(25)}$	-/C	-/C	/C	-1	1	C	-C	-C	C	1	-1	/C	-/C	-/C	/C	1	-1	-C	C	C	-C	-/C		
$\chi_{10}^{(26)}$	-C	-C	C	-1	1	/C	-/C	-/C	/C	1	-1	C	-C	-C	C	1	-1	-/C	/C	/C	-/C	-C		
$\chi_{10}^{(27)}$	-/C	-/C	-/C	1	1	-C	-C	-C	-C	1	1	-/C	-/C	-/C	-/C	1	1	-C	-C	-C	-C	-/C		
$\chi_{10}^{(28)}$	-C	-C	-C	1	1	-/C	-/C	-/C	-/C	1	1	-C	-C	-C	-C	1	1	-/C	-/C	-/C	-/C	-C		
$\chi_{10}^{(29)}$	/E	-/F	/F	-B	B	-G	G	-G	G	-B	B	-/F	/F	-/E	/E	-/B	/B	-C	C	-F	F	-/D		
$\chi_{10}^{(30)}$	/G	-/D	/D	-/A	/A	-F	F	-F	F	-/A	/A	-/D	/D	-/G	/G	-A	A	-C	C	-D	D	-/E		

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$\chi_{10}^{(31)}$	/D	-/G	/G	-A	A	-E	E	-E	E	-A	A	-/G	/G	-/D	/D	-/A	/A	-C	C	-G	G	-/F
$\chi_{10}^{(32)}$	/F	-/E	/E	-/B	/B	-D	D	-D	D	-/B	/B	-/E	/E	-/F	/F	-B	B	-C	C	-E	E	-/G
$\chi_{10}^{(33)}$	F	-E	E	-B	B	-/D	/D	-/D	/D	-B	B	-E	E	-F	F	-/B	/B	-/C	/C	-/E	/E	-G
$\chi_{10}^{(34)}$	D	-G	G	-/A	/A	-/E	/E	-/E	/E	-/A	/A	-G	G	-D	D	-A	A	-/C	/C	-/G	/G	-F
$\chi_{10}^{(35)}$	G	-D	D	-A	A	-/F	/F	-/F	/F	-A	A	-D	D	-G	G	-/A	/A	-/C	/C	-/D	/D	-E
$\chi_{10}^{(36)}$	E	-F	F	-/B	/B	-/G	/G	-/G	/G	-/B	/B	-F	F	-E	E	-B	B	-/C	/C	-/F	/F	-D
$\chi_{10}^{(37)}$	/E	-/F	-/F	B	B	G	G	-G	-G	-B	-B	/F	/F	-/E	-/E	-/B	-/B	-C	-C	F	F	-/D
$\chi_{10}^{(38)}$	/G	-/D	-/D	/A	/A	F	F	-F	-F	-/A	-/A	/D	/D	-/G	-/G	-A	-A	-C	-C	D	D	-/E
$\chi_{10}^{(39)}$	/D	-/G	-/G	A	A	E	E	-E	-E	-A	-A	/G	/G	-/D	-/D	-/A	-/A	-C	-C	G	G	-/F
$\chi_{10}^{(40)}$	/F	-/E	-/E	/B	/B	D	D	-D	-D	-/B	-/B	/E	/E	-/F	-/F	-B	-B	-C	-C	E	E	-/G
$\chi_{10}^{(41)}$	F	-E	-E	B	B	/D	/D	-/D	-/D	-B	-B	E	E	-F	-F	-/B	-/B	-/C	-/C	/E	/E	-G
$\chi_{10}^{(42)}$	D	-G	-G	/A	/A	/E	/E	-/E	-/E	-/A	-/A	G	G	-D	-D	-A	-A	-/C	-/C	/G	/G	-F
$\chi_{10}^{(43)}$	G	-D	-D	A	A	/F	/F	-/F	-/F	-A	-A	D	D	-G	-G	-/A	-/A	-/C	-/C	/D	/D	-E
$\chi_{10}^{(44)}$	E	-F	-F	/B	/B	/G	/G	-/G	-/G	-/B	-/B	F	F	-E	-E	-B	-B	-/C	-/C	/F	/F	-D
$\chi_{10}^{(45)}$	-/E	-/F	/F	B	-B	G	-G	-G	G	-B	B	/F	-/F	-/E	/E	-/B	/B	-C	C	F	-F	-/D
$\chi_{10}^{(46)}$	-/G	-/D	/D	/A	-/A	F	-F	-F	F	-/A	/A	/D	-/D	-/G	/G	-A	A	-C	C	D	-D	-/E
$\chi_{10}^{(47)}$	-/D	-/G	/G	A	-A	E	-E	-E	E	-A	A	/G	-/G	-/D	/D	-/A	/A	-C	C	G	-G	-/F
$\chi_{10}^{(48)}$	-/F	-/E	/E	/B	-/B	D	-D	-D	D	-/B	/B	/E	-/E	-/F	/F	-B	B	-C	C	E	-E	-/G
$\chi_{10}^{(49)}$	-F	-E	E	B	-B	/D	-/D	-/D	/D	-B	B	E	-E	-F	F	-/B	/B	-/C	/C	/E	-/E	-G
$\chi_{10}^{(50)}$	-D	-G	G	/A	-/A	/E	-/E	-/E	/E	-/A	/A	G	-G	-D	D	-A	A	-/C	/C	/G	-/G	-F
$\chi_{10}^{(51)}$	-G	-D	D	A	-A	/F	-/F	-/F	/F	-A	A	D	-D	-G	G	-/A	/A	-/C	/C	/D	-/D	-E
$\chi_{10}^{(52)}$	-E	-F	F	/B	-/B	/G	-/G	-/G	/G	-/B	/B	F	-F	-E	E	-B	B	-/C	/C	/F	-/F	-D
$\chi_{10}^{(53)}$	-/E	-/F	-/F	-B	-B	-G	-G	-G	-G	-B	-B	-/F	-/F	-/E	-/E	-/B	-/B	-C	-C	-F	-F	-/D
$\chi_{10}^{(54)}$	-/G	-/D	-/D	-/A	-/A	-F	-F	-F	-F	-/A	-/A	-/D	-/D	-/G	-/G	-A	-A	-C	-C	-D	-D	-/E
$\chi_{10}^{(55)}$	-/D	-/G	-/G	-A	-A	-E	-E	-E	-E	-A	-A	-/G	-/G	-/D	-/D	-/A	-/A	-C	-C	-G	-G	-/F
$\chi_{10}^{(56)}$	-/F	-/E	-/E	-/B	-/B	-D	-D	-D	-D	-/B	-/B	-/E	-/E	-/F	-/F	-B	-B	-C	-C	-E	-E	-/G
$\chi_{10}^{(57)}$	-F	-E	-E	-B	-B	-/D	-/D	-/D	-/D	-B	-B	-E	-E	-F	-F	-/B	-/B	-/C	-/C	-/E	-/E	-G
$\chi_{10}^{(58)}$	-D	-G	-G	-/A	-/A	-/E	-/E	-/E	-/E	-/A	-/A	-G	-G	-D	-D	-A	-A	-/C	-/C	-/G	-/G	-F
$\chi_{10}^{(59)}$	-G	-D	-D	-A	-A	-/F	-/F	-/F	-/F	-A	-A	-D	-D	-G	-G	-/A	-/A	-/C	-/C	-/D	-/D	-E
$\chi_{10}^{(60)}$	-E	-F	-F	-/B	-/B	-/G	-/G	-/G	-/G	-/B	-/B	-F	-F	-E	-E	-B	-B	-/C	-/C	-/F	-/F	-D
	50										60											
$\chi_{10}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
$\chi_{10}^{(2)}$	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1							
$\chi_{10}^{(3)}$	1	-1	-1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1							
$\chi_{10}^{(4)}$	-1	-1	1	1	-1	1	-1	1	-1	-1	1	-1	1	-1	1							
$\chi_{10}^{(5)}$	/A	-B	B	-/A	/A	1	-1	-A	-1	-A	A	-A	A	-A	A							
$\chi_{10}^{(6)}$	/B	-/A	/A	-/B	/B	1	-1	-B	-1	-B	B	-B	B	-B	B							
$\chi_{10}^{(7)}$	B	-A	A	-B	B	1	-1	-/B	-1	-/B	/B	-/B	/B	-/B	/B							
$\chi_{10}^{(8)}$	A	-/B	/B	-A	A	1	-1	-/A	-1	-/A	/A	-/A	/A	-/A	/A							
$\chi_{10}^{(9)}$	-/A	B	B	-/A	-/A	1	1	-A	1	A	A	A	A	A	A							
$\chi_{10}^{(10)}$	-/B	/A	/A	-/B	-/B	1	1	-B	1	B	B	B	B	B	B							
$\chi_{10}^{(11)}$	-B	A	A	-B	-B	1	1	-/B	1	/B	/B	/B	/B	/B	/B							
$\chi_{10}^{(12)}$	-A	/B	/B	-A	-A	1	1	-/A	1	/A	/A	/A	/A	/A	/A							
$\chi_{10}^{(13)}$	/A	B	-B	-/A	/A	1	-1	-A	-1	A	-A	A	-A	A	-A							
$\chi_{10}^{(14)}$	/B	/A	-/A	-/B	/B	1	-1	-B	-1	B	-B	B	-B	B	-B							
$\chi_{10}^{(15)}$	B	A	-A	-B	B	1	-1	-/B	-1	/B	-/B	/B	-/B	/B	-/B							

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$\chi_{10}^{(16)}$	A	/B	-/B	-A	A	1	-1	-/A	-1	/A	-/A	/A	-/A	/A	-/A
$\chi_{10}^{(17)}$	-/A	-B	-B	-/A	-/A	1	1	-A	1	-A	-A	-A	-A	-A	-A
$\chi_{10}^{(18)}$	-/B	-/A	-/A	-/B	-/B	1	1	-B	1	-B	-B	-B	-B	-B	-B
$\chi_{10}^{(19)}$	-B	-A	-A	-B	-B	1	1	-/B	1	-/B	-/B	-/B	-/B	-/B	-/B
$\chi_{10}^{(20)}$	-A	-/B	-/B	-A	-A	1	1	-/A	1	-/A	-/A	-/A	-/A	-/A	-/A
$\chi_{10}^{(21)}$	/C	-C	C	1	-1	-/C	/C	-C	-1	1	-1	-/C	/C	-C	C
$\chi_{10}^{(22)}$	C	-/C	/C	1	-1	-C	C	-/C	-1	1	-1	-C	C	-/C	/C
$\chi_{10}^{(23)}$	-/C	C	C	1	1	-/C	-/C	-C	1	-1	-1	/C	/C	C	C
$\chi_{10}^{(24)}$	-C	/C	/C	1	1	-C	-C	-/C	1	-1	-1	C	C	/C	/C
$\chi_{10}^{(25)}$	/C	C	-C	1	-1	-/C	/C	-C	-1	-1	1	/C	-/C	C	-C
$\chi_{10}^{(26)}$	C	/C	-/C	1	-1	-C	C	-/C	-1	-1	1	C	-C	/C	-/C
$\chi_{10}^{(27)}$	-/C	-C	-C	1	1	-/C	-/C	-C	1	1	1	-/C	-/C	-C	-C
$\chi_{10}^{(28)}$	-C	-/C	-/C	1	1	-C	-C	-/C	1	1	1	-C	-C	-/C	-/C
$\chi_{10}^{(29)}$	/D	-E	E	-/A	/A	-/C	/C	-D	-1	-A	A	-/G	/G	-D	D
$\chi_{10}^{(30)}$	/E	-G	G	-/B	/B	-/C	/C	-E	-1	-B	B	-/F	/F	-E	E
$\chi_{10}^{(31)}$	/F	-D	D	-B	B	-/C	/C	-F	-1	-/B	/B	-/E	/E	-F	F
$\chi_{10}^{(32)}$	/G	-F	F	-A	A	-/C	/C	-G	-1	-/A	/A	-/D	/D	-G	G
$\chi_{10}^{(33)}$	G	-/F	/F	-/A	/A	-C	C	-/G	-1	-A	A	-D	D	-/G	/G
$\chi_{10}^{(34)}$	F	-/D	/D	-/B	/B	-C	C	-/F	-1	-B	B	-E	E	-/F	/F
$\chi_{10}^{(35)}$	E	-/G	/G	-B	B	-C	C	-/E	-1	-/B	/B	-F	F	-/E	/E
$\chi_{10}^{(36)}$	D	-/E	/E	-A	A	-C	C	-/D	-1	-/A	/A	-G	G	-/D	/D
$\chi_{10}^{(37)}$	-/D	E	E	-/A	-/A	-/C	-/C	-D	1	A	A	/G	/G	D	D
$\chi_{10}^{(38)}$	-/E	G	G	-/B	-/B	-/C	-/C	-E	1	B	B	/F	/F	E	E
$\chi_{10}^{(39)}$	-/F	D	D	-B	-B	-/C	-/C	-F	1	/B	/B	/E	/E	F	F
$\chi_{10}^{(40)}$	-/G	F	F	-A	-A	-/C	-/C	-G	1	/A	/A	/D	/D	G	G
$\chi_{10}^{(41)}$	-G	/F	/F	-/A	-/A	-C	-C	-/G	1	A	A	D	D	/G	/G
$\chi_{10}^{(42)}$	-F	/D	/D	-/B	-/B	-C	-C	-/F	1	B	B	E	E	/F	/F
$\chi_{10}^{(43)}$	-E	/G	/G	-B	-B	-C	-C	-/E	1	/B	/B	F	F	/E	/E
$\chi_{10}^{(44)}$	-D	/E	/E	-A	-A	-C	-C	-/D	1	/A	/A	G	G	/D	/D
$\chi_{10}^{(45)}$	/D	E	-E	-/A	/A	-/C	/C	-D	-1	A	-A	/G	-/G	D	-D
$\chi_{10}^{(46)}$	/E	G	-G	-/B	/B	-/C	/C	-E	-1	B	-B	/F	-/F	E	-E
$\chi_{10}^{(47)}$	/F	D	-D	-B	B	-/C	/C	-F	-1	/B	-/B	/E	-/E	F	-F
$\chi_{10}^{(48)}$	/G	F	-F	-A	A	-/C	/C	-G	-1	/A	-/A	/D	-/D	G	-G
$\chi_{10}^{(49)}$	G	/F	-/F	-/A	/A	-C	C	-/G	-1	A	-A	D	-D	/G	-/G
$\chi_{10}^{(50)}$	F	/D	-/D	-/B	/B	-C	C	-/F	-1	B	-B	E	-E	/F	-/F
$\chi_{10}^{(51)}$	E	/G	-/G	-B	B	-C	C	-/E	-1	/B	-/B	F	-F	/E	-/E
$\chi_{10}^{(52)}$	D	/E	-/E	-A	A	-C	C	-/D	-1	/A	-/A	G	-G	/D	-/D
$\chi_{10}^{(53)}$	-/D	-E	-E	-/A	-/A	-/C	-/C	-D	1	-A	-A	-/G	-/G	-D	-D
$\chi_{10}^{(54)}$	-/E	-G	-G	-/B	-/B	-/C	-/C	-E	1	-B	-B	-/F	-/F	-E	-E
$\chi_{10}^{(55)}$	-/F	-D	-D	-B	-B	-/C	-/C	-F	1	-/B	-/B	-/E	-/E	-F	-F
$\chi_{10}^{(56)}$	-/G	-F	-F	-A	-A	-/C	-/C	-G	1	-/A	-/A	-/D	-/D	-G	-G
$\chi_{10}^{(57)}$	-G	-/F	-/F	-/A	-/A	-C	-C	-/G	1	-A	-A	-D	-D	-/G	-/G
$\chi_{10}^{(58)}$	-F	-/D	-/D	-/B	-/B	-C	-C	-/F	1	-B	-B	-E	-E	-/F	-/F
$\chi_{10}^{(59)}$	-E	-/G	-/G	-B	-B	-C	-C	-/E	1	-/B	-/B	-F	-F	-/E	-/E
$\chi_{10}^{(60)}$	-D	-/E	-/E	-A	-A	-C	-C	-/D	1	-/A	-/A	-G	-G	-/D	-/D

where $A = -E(5)^3, B = -E(5), C = -E(3) = (1-ER(-3))/2 = -b3, D = -E(15)^{14}, E = -E(15)^8, F = -E(15)^2, G = -E(15)^{11}$.

The generators of $G^{s_{11}}$ are:

$$\begin{pmatrix} -1 & -2 & 1 & 1 & -1 & 1 & 0 & 0 \\ -3 & -2 & 2 & 1 & -1 & 1 & 0 & 0 \\ -3 & -3 & 2 & 2 & -2 & 2 & -1 & 1 \\ -5 & -4 & 3 & 3 & -3 & 2 & 0 & 1 \\ -4 & -3 & 2 & 2 & -2 & 2 & 0 & 1 \\ -3 & -2 & 2 & 1 & -2 & 2 & 0 & 1 \\ -2 & -2 & 1 & 1 & -1 & 1 & 0 & 1 \\ -1 & -1 & 1 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 1 & 0 & -1 & 1 & 0 & -1 & 1 & 0 \\ 1 & -1 & 0 & 1 & 0 & -1 & 1 & 0 \\ 1 & -1 & -1 & 2 & 0 & -1 & 1 & 0 \\ 1 & -1 & -1 & 1 & 1 & -1 & 1 & 0 \\ 1 & -1 & -1 & 1 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 & 0 & 0 & 0 & -1 \\ 0 & 0 & 0 & 1 & -1 & 1 & 0 & -1 \\ 0 & 0 & 0 & 1 & -1 & 0 & 1 & -1 \\ 0 & 0 & 0 & 1 & -1 & 0 & 0 & 0 \end{pmatrix},$$

$$\begin{pmatrix} 1 & 0 & -1 & 1 & 0 & -1 & 1 & -1 \\ 0 & 1 & -1 & 1 & 0 & -1 & 1 & -1 \\ 0 & 0 & -1 & 2 & 0 & -2 & 2 & -2 \\ 0 & 0 & -2 & 3 & 0 & -2 & 2 & -2 \\ 0 & 0 & -2 & 2 & 1 & -2 & 2 & -2 \\ 0 & 0 & -2 & 2 & 0 & -1 & 2 & -2 \\ 0 & 0 & -1 & 1 & 0 & -1 & 2 & -1 \\ 0 & 0 & -1 & 1 & 0 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 1 & 0 & -1 & 0 & 1 & 0 & -1 \\ 0 & 2 & 0 & -1 & 0 & 1 & 0 & -1 \\ 0 & 2 & 1 & -2 & 0 & 2 & 0 & -2 \\ 0 & 3 & 0 & -2 & 0 & 3 & 0 & -3 \\ 0 & 2 & 0 & -2 & 1 & 2 & 0 & -2 \\ 0 & 1 & 0 & -1 & 0 & 2 & 0 & -1 \\ 0 & 1 & 0 & -1 & 0 & 1 & 1 & -1 \\ 0 & 1 & 0 & -1 & 0 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 1 & 0 & -2 & 1 & 1 & 0 \\ 0 & 1 & 1 & -1 & -2 & 1 & 2 & 0 \\ 0 & 0 & 2 & -1 & -3 & 2 & 2 & 0 \\ 0 & 1 & 2 & -1 & -5 & 3 & 3 & 0 \\ -1 & 1 & 2 & -1 & -4 & 3 & 2 & 0 \\ -1 & 1 & 2 & -1 & -3 & 2 & 1 & 1 \\ -1 & 1 & 2 & -1 & -2 & 1 & 1 & 0 \\ 0 & 1 & 1 & -1 & -1 & 1 & 0 & 0 \end{pmatrix}.$$

The representatives of conjugacy classes of $G^{s_{11}}$ are:

$$\begin{pmatrix} 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 0 & 1 & -2 & 1 & -1 & 2 \\ -1 & 1 & 0 & 1 & -2 & 1 & -2 & 3 \\ -1 & 1 & 1 & 1 & -3 & 1 & -2 & 4 \\ -2 & 1 & 1 & 2 & -4 & 1 & -3 & 6 \\ -2 & 1 & 1 & 1 & -3 & 1 & -2 & 5 \\ -1 & 1 & 1 & 0 & -2 & 1 & -2 & 4 \\ 0 & 1 & 0 & 0 & -1 & 0 & -1 & 3 \\ 0 & 0 & 0 & 0 & 0 & 0 & -1 & 2 \end{pmatrix}, \begin{pmatrix} 1 & -1 & 0 & 0 & 1 & 0 & -2 & 1 \\ 0 & -1 & 0 & 0 & 2 & 0 & -3 & 1 \\ 1 & -1 & 0 & 0 & 2 & 0 & -4 & 2 \\ 1 & -2 & 0 & 0 & 4 & -1 & -5 & 2 \\ 1 & -1 & 0 & -1 & 4 & -1 & -4 & 2 \\ 1 & -1 & 0 & -1 & 3 & 0 & -3 & 1 \\ 1 & -1 & -1 & 0 & 2 & 0 & -2 & 1 \\ 0 & -1 & 0 & 0 & 1 & 0 & -1 & 1 \end{pmatrix},$$

$$\begin{pmatrix} 0 & 0 & 2 & -1 & 0 & -1 & 0 & 1 \\ -1 & 1 & 3 & -2 & 1 & -2 & 0 & 1 \\ -1 & 0 & 4 & -2 & 1 & -2 & -1 & 2 \\ -1 & 1 & 5 & -3 & 2 & -4 & -1 & 3 \\ -1 & 1 & 4 & -3 & 2 & -3 & -1 & 3 \\ 0 & 1 & 3 & -3 & 2 & -2 & -1 & 2 \\ 0 & 0 & 2 & -2 & 2 & -2 & 0 & 1 \\ 0 & 0 & 1 & -1 & 1 & -1 & 0 & 1 \end{pmatrix}, \begin{pmatrix} -1 & -2 & 1 & 1 & -1 & 1 & 0 & 0 \\ -3 & -2 & 2 & 1 & -1 & 1 & 0 & 0 \\ -3 & -3 & 2 & 2 & -2 & 2 & -1 & 1 \\ -5 & -4 & 3 & 3 & -3 & 2 & 0 & 1 \\ -4 & -3 & 2 & 2 & -2 & 2 & 0 & 1 \\ -3 & -2 & 2 & 1 & -2 & 2 & 0 & 1 \\ -2 & -2 & 1 & 1 & -1 & 1 & 0 & 1 \\ -1 & -1 & 1 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 1 & 2 & -1 & -1 & 1 & -1 & 0 & 0 \\ 3 & 2 & -2 & -1 & 1 & -1 & 0 & 0 \\ 3 & 3 & -2 & -2 & 2 & -2 & 1 & -1 \\ 5 & 4 & -3 & -3 & 3 & -2 & 0 & -1 \\ 4 & 3 & -2 & -2 & 2 & -2 & 0 & -1 \\ 3 & 2 & -2 & -1 & 2 & -2 & 0 & -1 \\ 2 & 2 & -1 & -1 & 1 & -1 & 0 & -1 \\ 1 & 1 & -1 & 0 & 0 & 0 & 0 & -1 \end{pmatrix},$$

$$\begin{pmatrix} 0 & 0 & -2 & 1 & 0 & 1 & 0 & -1 \\ 1 & -1 & -3 & 2 & -1 & 2 & 0 & -1 \\ 1 & 0 & -4 & 2 & -1 & 2 & 1 & -2 \\ 1 & -1 & -5 & 3 & -2 & 4 & 1 & -3 \\ 1 & -1 & -4 & 3 & -2 & 3 & 1 & -3 \\ 0 & -1 & -3 & 3 & -2 & 2 & 1 & -2 \\ 0 & 0 & -2 & 2 & -2 & 2 & 0 & -1 \\ 0 & 0 & -1 & 1 & -1 & 1 & 0 & -1 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & -1 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & -1 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & -1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & -1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & -1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & -1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} -1 & 1 & 0 & 0 & -1 & 0 & 2 & -1 \\ 0 & 1 & 0 & 0 & -2 & 0 & 3 & -1 \\ -1 & 1 & 0 & 0 & -2 & 0 & 4 & -2 \\ -1 & 2 & 0 & 0 & -4 & 1 & 5 & -2 \\ -1 & 1 & 0 & 1 & -4 & 1 & 4 & -2 \\ -1 & 1 & 0 & 1 & -3 & 0 & 3 & -1 \\ -1 & 1 & 1 & 0 & -2 & 0 & 2 & -1 \\ 0 & 1 & 0 & 0 & -1 & 0 & 1 & -1 \end{pmatrix},$$

$$\begin{pmatrix} 0 & 0 & 0 & -1 & 2 & -1 & 1 & -2 \\ 1 & -1 & 0 & -1 & 2 & -1 & 2 & -3 \\ 1 & -1 & -1 & -1 & 3 & -1 & 2 & -4 \\ 2 & -1 & -1 & -2 & 4 & -1 & 3 & -6 \\ 2 & -1 & -1 & -1 & 3 & -1 & 2 & -5 \\ 1 & -1 & -1 & 0 & 2 & -1 & 2 & -4 \\ 0 & -1 & 0 & 0 & 1 & 0 & 1 & -3 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & -2 \end{pmatrix}, \begin{pmatrix} 1 & 1 & 0 & -1 & 0 & 1 & 0 & -1 \\ 0 & 2 & 0 & -1 & 0 & 1 & 0 & -1 \\ 0 & 2 & 1 & -2 & 0 & 2 & 0 & -2 \\ 0 & 3 & 0 & -2 & 0 & 3 & 0 & -3 \\ 0 & 2 & 0 & -2 & 1 & 2 & 0 & -2 \\ 0 & 1 & 0 & -1 & 0 & 2 & 0 & -1 \\ 0 & 1 & 0 & -1 & 0 & 1 & 1 & -1 \\ 0 & 1 & 0 & -1 & 0 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 0 & 0 & -2 & 2 & -1 & 1 \\ -1 & 2 & 0 & 0 & -2 & 2 & -2 & 2 \\ -1 & 3 & 1 & -1 & -3 & 3 & -2 & 2 \\ -2 & 4 & 1 & -1 & -4 & 4 & -3 & 3 \\ -2 & 3 & 1 & -1 & -3 & 3 & -2 & 3 \\ -1 & 2 & 1 & -1 & -2 & 2 & -2 & 3 \\ 0 & 2 & 0 & -1 & -1 & 1 & -1 & 2 \\ 0 & 1 & 0 & -1 & 0 & 1 & -1 & 1 \end{pmatrix}, \\
\begin{pmatrix} 1 & 0 & 0 & -1 & 1 & 1 & -2 & 0 \\ 0 & 0 & 0 & -1 & 2 & 1 & -3 & 0 \\ 1 & 1 & 0 & -2 & 2 & 2 & -4 & 0 \\ 1 & 1 & 0 & -3 & 4 & 2 & -5 & -1 \\ 1 & 1 & 0 & -3 & 4 & 1 & -4 & 0 \\ 1 & 0 & 0 & -2 & 3 & 1 & -3 & 0 \\ 1 & 0 & -1 & -1 & 2 & 1 & -2 & 0 \\ 0 & 0 & 0 & -1 & 1 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 2 & -2 & 0 & 0 & 0 & 0 \\ -1 & 2 & 3 & -3 & 1 & -1 & 0 & 0 \\ -1 & 2 & 4 & -4 & 1 & 0 & -1 & 0 \\ -1 & 4 & 5 & -6 & 2 & -1 & -1 & 0 \\ -1 & 3 & 4 & -5 & 2 & -1 & -1 & 1 \\ 0 & 2 & 3 & -4 & 2 & -1 & -1 & 1 \\ 0 & 1 & 2 & -3 & 2 & -1 & 0 & 0 \\ 0 & 1 & 1 & -2 & 1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 1 & 0 & -1 & 2 & 0 & -1 \\ -3 & -1 & 2 & 0 & -1 & 2 & 0 & -1 \\ -3 & -1 & 2 & 0 & -2 & 4 & -1 & -1 \\ -5 & -1 & 3 & 0 & -3 & 5 & 0 & -2 \\ -4 & -1 & 2 & 0 & -2 & 4 & 0 & -1 \\ -3 & -1 & 2 & 0 & -2 & 3 & 0 & 0 \\ -2 & -1 & 1 & 0 & -1 & 2 & 0 & 0 \\ -1 & 0 & 1 & -1 & 0 & 1 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 1 & 1 & -1 & 0 & 1 & -2 & 0 & 1 \\ 3 & 1 & -2 & 0 & 1 & -2 & 0 & 1 \\ 3 & 1 & -2 & 0 & 2 & -4 & 1 & 1 \\ 5 & 1 & -3 & 0 & 3 & -5 & 0 & 2 \\ 4 & 1 & -2 & 0 & 2 & -4 & 0 & 1 \\ 3 & 1 & -2 & 0 & 2 & -3 & 0 & 0 \\ 2 & 1 & -1 & 0 & 1 & -2 & 0 & 0 \\ 1 & 0 & -1 & 1 & 0 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -1 & -2 & 2 & 0 & 0 & 0 & 0 \\ 1 & -2 & -3 & 3 & -1 & 1 & 0 & 0 \\ 1 & -2 & -4 & 4 & -1 & 0 & 1 & 0 \\ 1 & -4 & -5 & 6 & -2 & 1 & 1 & 0 \\ 1 & -3 & -4 & 5 & -2 & 1 & 1 & -1 \\ 0 & -2 & -3 & 4 & -2 & 1 & 1 & -1 \\ 0 & -1 & -2 & 3 & -2 & 1 & 0 & 0 \\ 0 & -1 & -1 & 2 & -1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 0 & 1 & 0 & -1 & 0 & 1 \\ 0 & -2 & 0 & 1 & 0 & -1 & 0 & 1 \\ 0 & -2 & -1 & 2 & 0 & -2 & 0 & 2 \\ 0 & -3 & 0 & 2 & 0 & -3 & 0 & 3 \\ 0 & -2 & 0 & 2 & -1 & -2 & 0 & 2 \\ 0 & -1 & 0 & 1 & 0 & -2 & 0 & 1 \\ 0 & -1 & 0 & 1 & 0 & -1 & -1 & 1 \\ 0 & -1 & 0 & 1 & 0 & -1 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} -1 & 0 & 0 & 1 & -1 & -1 & 2 & 0 \\ 0 & 0 & 0 & 1 & -2 & -1 & 3 & 0 \\ -1 & -1 & 0 & 2 & -2 & -2 & 4 & 0 \\ -1 & -1 & 0 & 3 & -4 & -2 & 5 & 1 \\ -1 & -1 & 0 & 3 & -4 & -1 & 4 & 0 \\ -1 & 0 & 0 & 2 & -3 & -1 & 3 & 0 \\ -1 & 0 & 1 & 1 & -2 & -1 & 2 & 0 \\ 0 & 0 & 0 & 1 & -1 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 0 & 0 & 2 & -2 & 1 & -1 \\ 1 & -2 & 0 & 0 & 2 & -2 & 2 & -2 \\ 1 & -3 & -1 & 1 & 3 & -3 & 2 & -2 \\ 2 & -4 & -1 & 1 & 4 & -4 & 3 & -3 \\ 2 & -3 & -1 & 1 & 3 & -3 & 2 & -3 \\ 1 & -2 & -1 & 1 & 2 & -2 & 2 & -3 \\ 0 & -2 & 0 & 1 & 1 & -1 & 1 & -2 \\ 0 & -1 & 0 & 1 & 0 & -1 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 2 & 0 & -1 & 0 & 0 & 0 & 1 & -1 \\ 2 & 0 & -2 & 1 & 0 & -1 & 2 & -1 \\ 3 & -1 & -2 & 1 & 0 & -1 & 3 & -2 \\ 4 & -1 & -4 & 2 & 0 & -1 & 4 & -3 \\ 3 & -1 & -3 & 1 & 1 & -1 & 3 & -2 \\ 2 & -1 & -2 & 1 & 0 & 0 & 2 & -1 \\ 1 & 0 & -1 & 0 & 0 & 0 & 2 & -1 \\ 1 & 0 & -1 & 0 & 0 & 0 & 1 & 0 \end{pmatrix}, \\
\begin{pmatrix} 1 & 0 & -1 & 1 & -2 & 1 & 0 & 1 \\ 1 & 0 & -2 & 2 & -2 & 0 & 0 & 2 \\ 2 & 0 & -2 & 2 & -3 & 0 & 1 & 2 \\ 2 & 0 & -3 & 3 & -4 & 0 & 1 & 3 \\ 1 & 0 & -2 & 2 & -3 & 0 & 1 & 3 \\ 1 & 0 & -1 & 1 & -2 & 0 & 0 & 3 \\ 1 & 1 & -1 & 0 & -1 & 0 & 0 & 2 \\ 1 & 0 & -1 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 2 & -1 & -1 & 0 & 1 & 0 & -1 & 0 \\ 2 & -2 & -2 & 1 & 2 & -1 & -1 & 0 \\ 4 & -2 & -3 & 1 & 2 & -1 & -1 & 0 \\ 5 & -3 & -4 & 1 & 4 & -2 & -1 & -1 \\ 4 & -2 & -3 & 0 & 4 & -2 & -1 & 0 \\ 3 & -2 & -2 & 0 & 3 & -1 & -1 & 0 \\ 2 & -1 & -2 & 0 & 2 & 0 & -1 & 0 \\ 1 & -1 & -1 & 0 & 1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 1 & -1 & 0 & -1 & 1 & 0 \\ 1 & 0 & 1 & -1 & 1 & -3 & 2 & 0 \\ 2 & -1 & 1 & -1 & 1 & -3 & 2 & 0 \\ 3 & 0 & 1 & -2 & 2 & -5 & 3 & 0 \\ 2 & 0 & 1 & -2 & 2 & -4 & 2 & 1 \\ 2 & 0 & 1 & -2 & 2 & -3 & 1 & 1 \\ 1 & 0 & 1 & -2 & 2 & -2 & 1 & 0 \\ 1 & 0 & 0 & -1 & 1 & -1 & 1 & 0 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} 0 & -2 & 0 & 1 & -1 & 1 & 1 & -1 \\ -1 & -3 & 0 & 2 & -1 & 0 & 2 & -1 \\ 0 & -4 & -1 & 3 & -2 & 1 & 2 & -1 \\ -1 & -5 & -1 & 4 & -3 & 1 & 4 & -2 \\ -1 & -4 & -1 & 3 & -2 & 1 & 3 & -1 \\ -1 & -3 & 0 & 2 & -2 & 1 & 2 & 0 \\ -1 & -2 & 0 & 1 & -1 & 1 & 1 & 0 \\ 0 & -1 & 0 & 0 & 0 & 0 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 2 & 0 & -1 & 1 & -1 & -1 & 1 \\ 1 & 3 & 0 & -2 & 1 & 0 & -2 & 1 \\ 0 & 4 & 1 & -3 & 2 & -1 & -2 & 1 \\ 1 & 5 & 1 & -4 & 3 & -1 & -4 & 2 \\ 1 & 4 & 1 & -3 & 2 & -1 & -3 & 1 \\ 1 & 3 & 0 & -2 & 2 & -1 & -2 & 0 \\ 1 & 2 & 0 & -1 & 1 & -1 & -1 & 0 \\ 0 & 1 & 0 & 0 & 0 & 0 & -1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 0 & -1 & 1 & 0 & 1 & -1 & 0 \\ -1 & 0 & -1 & 1 & -1 & 3 & -2 & 0 \\ -2 & 1 & -1 & 1 & -1 & 3 & -2 & 0 \\ -3 & 0 & -1 & 2 & -2 & 5 & -3 & 0 \\ -2 & 0 & -1 & 2 & -2 & 4 & -2 & -1 \\ -2 & 0 & -1 & 2 & -2 & 3 & -1 & -1 \\ -1 & 0 & -1 & 2 & -2 & 2 & -1 & 0 \\ -1 & 0 & 0 & 1 & -1 & 1 & -1 & 0 \end{pmatrix}, \\
\begin{pmatrix} -2 & 0 & 1 & 0 & 0 & 0 & -1 & 1 \\ -2 & 0 & 2 & -1 & 0 & 1 & -2 & 1 \\ -3 & 1 & 2 & -1 & 0 & 1 & -3 & 2 \\ -4 & 1 & 4 & -2 & 0 & 1 & -4 & 3 \\ -3 & 1 & 3 & -1 & -1 & 1 & -3 & 2 \\ -2 & 1 & 2 & -1 & 0 & 0 & -2 & 1 \\ -1 & 0 & 1 & 0 & 0 & 0 & -2 & 1 \\ -1 & 0 & 1 & 0 & 0 & 0 & -1 & 0 \end{pmatrix}, \begin{pmatrix} -2 & 1 & 1 & 0 & -1 & 0 & 1 & 0 \\ -2 & 2 & 2 & -1 & -2 & 1 & 1 & 0 \\ -4 & 2 & 3 & -1 & -2 & 1 & 1 & 0 \\ -5 & 3 & 4 & -1 & -4 & 2 & 1 & 1 \\ -4 & 2 & 3 & 0 & -4 & 2 & 1 & 0 \\ -3 & 2 & 2 & 0 & -3 & 1 & 1 & 0 \\ -2 & 1 & 2 & 0 & -2 & 0 & 1 & 0 \\ -1 & 1 & 1 & 0 & -1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 1 & -1 & 2 & -1 & 0 & -1 \\ -1 & 0 & 2 & -2 & 2 & 0 & 0 & -2 \\ -2 & 0 & 2 & -2 & 3 & 0 & -1 & -2 \\ -2 & 0 & 3 & -3 & 4 & 0 & -1 & -3 \\ -1 & 0 & 2 & -2 & 3 & 0 & -1 & -3 \\ -1 & 0 & 1 & -1 & 2 & 0 & 0 & -3 \\ -1 & -1 & 1 & 0 & 1 & 0 & 0 & -2 \\ -1 & 0 & 1 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \\
\begin{pmatrix} 1 & 1 & 0 & -1 & 0 & 1 & 0 & -1 \\ 0 & 2 & 0 & -1 & 0 & 1 & 0 & -1 \\ 0 & 2 & 1 & -2 & 0 & 2 & 0 & -2 \\ 0 & 3 & 0 & -2 & 0 & 3 & 0 & -3 \\ 0 & 2 & 0 & -1 & 0 & 2 & 0 & -3 \\ 0 & 1 & 0 & 0 & -1 & 2 & 0 & -2 \\ 0 & 1 & 0 & 0 & -1 & 1 & 1 & -2 \\ 0 & 1 & 0 & 0 & -1 & 1 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 0 & 0 & -2 & 2 & -1 & 1 \\ -1 & 2 & 0 & 0 & -2 & 2 & -2 & 2 \\ -1 & 3 & 1 & -1 & -3 & 3 & -2 & 2 \\ -2 & 4 & 1 & -1 & -4 & 4 & -3 & 3 \\ -2 & 3 & 1 & 0 & -4 & 3 & -2 & 2 \\ -1 & 2 & 1 & 0 & -3 & 2 & -2 & 2 \\ 0 & 2 & 0 & 0 & -2 & 1 & -1 & 1 \\ 0 & 1 & 0 & 0 & -1 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 0 & -1 & 1 & 1 & -2 & 0 \\ 0 & 0 & 0 & -1 & 2 & 1 & -3 & 0 \\ 1 & 1 & 0 & -2 & 2 & 2 & -4 & 0 \\ 1 & 1 & 0 & -3 & 4 & 2 & -5 & -1 \\ 1 & 1 & 0 & -2 & 3 & 1 & -4 & -1 \\ 1 & 0 & 0 & -1 & 2 & 1 & -3 & -1 \\ 1 & 0 & -1 & 0 & 1 & 1 & -2 & -1 \\ 0 & 0 & 0 & 0 & 0 & 1 & -1 & -1 \end{pmatrix}, \\
\begin{pmatrix} 0 & 1 & 2 & -2 & 0 & 0 & 0 & 0 \\ -1 & 2 & 3 & -3 & 1 & -1 & 0 & 0 \\ -1 & 2 & 4 & -4 & 1 & 0 & -1 & 0 \\ -1 & 4 & 5 & -6 & 2 & -1 & -1 & 0 \\ -1 & 3 & 4 & -4 & 1 & -1 & -1 & 0 \\ 0 & 2 & 3 & -3 & 1 & -1 & -1 & 0 \\ 0 & 1 & 2 & -2 & 1 & -1 & 0 & -1 \\ 0 & 1 & 1 & -1 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 1 & 0 & -1 & 2 & 0 & -1 \\ -3 & -1 & 2 & 0 & -1 & 2 & 0 & -1 \\ -3 & -1 & 2 & 0 & -2 & 4 & -1 & -1 \\ -5 & -1 & 3 & 0 & -3 & 5 & 0 & -2 \\ -4 & -1 & 2 & 1 & -3 & 4 & 0 & -2 \\ -3 & -1 & 2 & 1 & -3 & 3 & 0 & -1 \\ -2 & -1 & 1 & 1 & -2 & 2 & 0 & -1 \\ -1 & 0 & 1 & 0 & -1 & 1 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 1 & 1 & -1 & 0 & 1 & -2 & 0 & 1 \\ 3 & 1 & -2 & 0 & 1 & -2 & 0 & 1 \\ 3 & 1 & -2 & 0 & 2 & -4 & 1 & 1 \\ 5 & 1 & -3 & 0 & 3 & -5 & 0 & 2 \\ 4 & 1 & -2 & -1 & 3 & -4 & 0 & 2 \\ 3 & 1 & -2 & -1 & 3 & -3 & 0 & 1 \\ 2 & 1 & -1 & -1 & 2 & -2 & 0 & 1 \\ 1 & 0 & -1 & 0 & 1 & -1 & 0 & 1 \end{pmatrix}, \\
\begin{pmatrix} 0 & -1 & -2 & 2 & 0 & 0 & 0 & 0 \\ 1 & -2 & -3 & 3 & -1 & 1 & 0 & 0 \\ 1 & -2 & -4 & 4 & -1 & 0 & 1 & 0 \\ 1 & -4 & -5 & 6 & -2 & 1 & 1 & 0 \\ 1 & -3 & -4 & 4 & -1 & 1 & 1 & 0 \\ 0 & -2 & -3 & 3 & -1 & 1 & 1 & 0 \\ 0 & -1 & -2 & 2 & -1 & 1 & 0 & 1 \\ 0 & -1 & -1 & 1 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 0 & 1 & 0 & -1 & 0 & 1 \\ 0 & -2 & 0 & 1 & 0 & -1 & 0 & 1 \\ 0 & -2 & -1 & 2 & 0 & -2 & 0 & 2 \\ 0 & -3 & 0 & 2 & 0 & -3 & 0 & 3 \\ 0 & -2 & 0 & 1 & 0 & -2 & 0 & 3 \\ 0 & -1 & 0 & 0 & 1 & -2 & 0 & 2 \\ 0 & -1 & 0 & 0 & 1 & -1 & -1 & 2 \\ 0 & -1 & 0 & 0 & 1 & -1 & 0 & 1 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 0 & 1 & -1 & -1 & 2 & 0 \\ 0 & 0 & 0 & 1 & -2 & -1 & 3 & 0 \\ -1 & -1 & 0 & 2 & -2 & -2 & 4 & 0 \\ -1 & -1 & 0 & 3 & -4 & -2 & 5 & 1 \\ -1 & -1 & 0 & 2 & -3 & -1 & 4 & 1 \\ -1 & 0 & 0 & 1 & -2 & -1 & 3 & 1 \\ -1 & 0 & 1 & 0 & -1 & -1 & 2 & 1 \\ 0 & 0 & 0 & 0 & 0 & -1 & 1 & 1 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} 0 & -1 & 0 & 0 & 2 & -2 & 1 & -1 \\ 1 & -2 & 0 & 0 & 2 & -2 & 2 & -2 \\ 1 & -3 & -1 & 1 & 3 & -3 & 2 & -2 \\ 2 & -4 & -1 & 1 & 4 & -4 & 3 & -3 \\ 2 & -3 & -1 & 0 & 4 & -3 & 2 & -2 \\ 1 & -2 & -1 & 0 & 3 & -2 & 2 & -2 \\ 0 & -2 & 0 & 0 & 2 & -1 & 1 & -1 \\ 0 & -1 & 0 & 0 & 1 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 2 & 0 & -1 & 0 & 0 & 0 & 1 & -1 \\ 2 & 0 & -2 & 1 & 0 & -1 & 2 & -1 \\ 3 & -1 & -2 & 1 & 0 & -1 & 3 & -2 \\ 4 & -1 & -4 & 2 & 0 & -1 & 4 & -3 \\ 3 & -1 & -3 & 2 & 0 & -1 & 3 & -3 \\ 2 & -1 & -2 & 2 & -1 & 0 & 2 & -2 \\ 1 & 0 & -1 & 1 & -1 & 0 & 2 & -2 \\ 1 & 0 & -1 & 1 & -1 & 0 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & -1 & 1 & -2 & 1 & 0 & 1 \\ 1 & 0 & -2 & 2 & -2 & 0 & 0 & 2 \\ 2 & 0 & -2 & 2 & -3 & 0 & 1 & 2 \\ 2 & 0 & -3 & 3 & -4 & 0 & 1 & 3 \\ 1 & 0 & -2 & 3 & -4 & 0 & 1 & 2 \\ 1 & 0 & -1 & 2 & -3 & 0 & 0 & 2 \\ 1 & 1 & -1 & 1 & -2 & 0 & 0 & 1 \\ 1 & 0 & -1 & 1 & -1 & 0 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 2 & -1 & -1 & 0 & 1 & 0 & -1 & 0 \\ 2 & -2 & -2 & 1 & 2 & -1 & -1 & 0 \\ 4 & -2 & -3 & 1 & 2 & -1 & -1 & 0 \\ 5 & -3 & -4 & 1 & 4 & -2 & -1 & -1 \\ 4 & -2 & -3 & 1 & 3 & -2 & -1 & -1 \\ 3 & -2 & -2 & 1 & 2 & -1 & -1 & -1 \\ 2 & -1 & -2 & 1 & 1 & 0 & -1 & -1 \\ 1 & -1 & -1 & 1 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 1 & -1 & 0 & -1 & 1 & 0 \\ 1 & 0 & 1 & -1 & 1 & -3 & 2 & 0 \\ 2 & -1 & 1 & -1 & 1 & -3 & 2 & 0 \\ 3 & 0 & 1 & -2 & 2 & -5 & 3 & 0 \\ 2 & 0 & 1 & -1 & 1 & -4 & 2 & 0 \\ 2 & 0 & 1 & -1 & 1 & -3 & 1 & 0 \\ 1 & 0 & 1 & -1 & 1 & -2 & 1 & -1 \\ 1 & 0 & 0 & 0 & 0 & -1 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 0 & -2 & 0 & 1 & -1 & 1 & 1 & -1 \\ -1 & -3 & 0 & 2 & -1 & 0 & 2 & -1 \\ 0 & -4 & -1 & 3 & -2 & 1 & 2 & -1 \\ -1 & -5 & -1 & 4 & -3 & 1 & 4 & -2 \\ -1 & -4 & -1 & 4 & -3 & 1 & 3 & -2 \\ -1 & -3 & 0 & 3 & -3 & 1 & 2 & -1 \\ -1 & -2 & 0 & 2 & -2 & 1 & 1 & -1 \\ 0 & -1 & 0 & 1 & -1 & 0 & 1 & -1 \end{pmatrix}, \\
\begin{pmatrix} 0 & 2 & 0 & -1 & 1 & -1 & -1 & 1 \\ 1 & 3 & 0 & -2 & 1 & 0 & -2 & 1 \\ 0 & 4 & 1 & -3 & 2 & -1 & -2 & 1 \\ 1 & 5 & 1 & -4 & 3 & -1 & -4 & 2 \\ 1 & 4 & 1 & -4 & 3 & -1 & -3 & 2 \\ 1 & 3 & 0 & -3 & 3 & -1 & -2 & 1 \\ 1 & 2 & 0 & -2 & 2 & -1 & -1 & 1 \\ 0 & 1 & 0 & -1 & 1 & 0 & -1 & 1 \end{pmatrix}, \begin{pmatrix} -1 & 0 & -1 & 1 & 0 & 1 & -1 & 0 \\ -1 & 0 & -1 & 1 & -1 & 3 & -2 & 0 \\ -2 & 1 & -1 & 1 & -1 & 3 & -2 & 0 \\ -3 & 0 & -1 & 2 & -2 & 5 & -3 & 0 \\ -2 & 0 & -1 & 1 & -1 & 4 & -2 & 0 \\ -2 & 0 & -1 & 1 & -1 & 3 & -1 & 0 \\ -1 & 0 & -1 & 1 & -1 & 2 & -1 & 1 \\ -1 & 0 & 0 & 0 & 0 & 1 & -1 & 1 \end{pmatrix}, \begin{pmatrix} -2 & 0 & 1 & 0 & 0 & 0 & -1 & 1 \\ -2 & 0 & 2 & -1 & 0 & 1 & -2 & 1 \\ -3 & 1 & 2 & -1 & 0 & 1 & -3 & 2 \\ -4 & 1 & 4 & -2 & 0 & 1 & -4 & 3 \\ -3 & 1 & 3 & -2 & 0 & 1 & -3 & 3 \\ -2 & 1 & 2 & -2 & 1 & 0 & -2 & 2 \\ -1 & 0 & 1 & -1 & 1 & 0 & -2 & 2 \\ -1 & 0 & 1 & -1 & 1 & 0 & -1 & 1 \end{pmatrix}, \\
\begin{pmatrix} -2 & 1 & 1 & 0 & -1 & 0 & 1 & 0 \\ -2 & 2 & 2 & -1 & -2 & 1 & 1 & 0 \\ -4 & 2 & 3 & -1 & -2 & 1 & 1 & 0 \\ -5 & 3 & 4 & -1 & -4 & 2 & 1 & 1 \\ -4 & 2 & 3 & -1 & -3 & 2 & 1 & 1 \\ -3 & 2 & 2 & -1 & -2 & 1 & 1 & 1 \\ -2 & 1 & 2 & -1 & -1 & 0 & 1 & 1 \\ -1 & 1 & 1 & -1 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 1 & -1 & 2 & -1 & 0 & -1 \\ -1 & 0 & 2 & -2 & 2 & 0 & 0 & -2 \\ -2 & 0 & 2 & -2 & 3 & 0 & -1 & -2 \\ -2 & 0 & 3 & -3 & 4 & 0 & -1 & -3 \\ -1 & 0 & 2 & -3 & 4 & 0 & -1 & -2 \\ -1 & 0 & 1 & -2 & 3 & 0 & 0 & -2 \\ -1 & -1 & 1 & -1 & 2 & 0 & 0 & -1 \\ -1 & 0 & 1 & -1 & 1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & -1 & 1 & 0 & -1 & 1 & -1 \\ 1 & 0 & -1 & 1 & 0 & -1 & 1 & 0 \\ 1 & -1 & -1 & 2 & 0 & -2 & 2 & -1 \\ 1 & -1 & -2 & 3 & 0 & -2 & 2 & -1 \\ 1 & -1 & -1 & 2 & 0 & -1 & 1 & -1 \\ 1 & -1 & -1 & 2 & -1 & 0 & 1 & -1 \\ 0 & 0 & 0 & 1 & -1 & 0 & 1 & -1 \\ 0 & 0 & 0 & 1 & -1 & 0 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 0 & 0 & -1 & 2 & -2 & 0 & 0 & 1 \\ 0 & 0 & -1 & 2 & -2 & 0 & -1 & 3 \\ 0 & 0 & -1 & 3 & -3 & -1 & 0 & 3 \\ -1 & 0 & -1 & 4 & -4 & -1 & -1 & 5 \\ -1 & 0 & 0 & 3 & -4 & 0 & -1 & 4 \\ 0 & 0 & 0 & 2 & -3 & 0 & -1 & 3 \\ 0 & 1 & 0 & 1 & -2 & 0 & -1 & 2 \\ 0 & 0 & 0 & 1 & -1 & 0 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 1 & -1 & -1 & 1 & 1 & -1 & -1 & 0 \\ 1 & -2 & -1 & 1 & 2 & -1 & -2 & 1 \\ 2 & -2 & -2 & 2 & 2 & -2 & -2 & 1 \\ 2 & -3 & -2 & 2 & 4 & -3 & -3 & 1 \\ 2 & -2 & -1 & 1 & 3 & -2 & -3 & 1 \\ 2 & -2 & -1 & 1 & 2 & -1 & -2 & 0 \\ 1 & -1 & -1 & 1 & 1 & 0 & -2 & 0 \\ 0 & -1 & 0 & 1 & 0 & 0 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 1 & 0 & 0 & -2 & 1 & 0 \\ 0 & 0 & 2 & -1 & 1 & -3 & 1 & 1 \\ 0 & -1 & 2 & 0 & 1 & -4 & 1 & 1 \\ 0 & 0 & 3 & -1 & 2 & -6 & 1 & 2 \\ 0 & 0 & 3 & -1 & 1 & -4 & 0 & 2 \\ 1 & 0 & 2 & -1 & 1 & -3 & 0 & 1 \\ 0 & 0 & 2 & -1 & 1 & -2 & 0 & 0 \\ 0 & 0 & 1 & 0 & 0 & -1 & 0 & 0 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} -1 & -2 & 0 & 2 & -1 & 0 & 1 & -1 \\ -2 & -3 & 1 & 2 & -1 & 0 & 1 & 0 \\ -2 & -4 & 0 & 4 & -2 & 0 & 1 & 0 \\ -4 & -5 & 1 & 5 & -3 & 0 & 2 & 0 \\ -3 & -4 & 1 & 4 & -3 & 1 & 1 & 0 \\ -2 & -3 & 1 & 3 & -3 & 1 & 1 & 0 \\ -2 & -2 & 1 & 2 & -2 & 1 & 0 & 0 \\ -1 & -1 & 1 & 1 & -1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 2 & 0 & -2 & 1 & 0 & -1 & 1 \\ 2 & 3 & -1 & -2 & 1 & 0 & -1 & 0 \\ 2 & 4 & 0 & -4 & 2 & 0 & -1 & 0 \\ 4 & 5 & -1 & -5 & 3 & 0 & -2 & 0 \\ 3 & 4 & -1 & -4 & 3 & -1 & -1 & 0 \\ 2 & 3 & -1 & -3 & 3 & -1 & -1 & 0 \\ 2 & 2 & -1 & -2 & 2 & -1 & 0 & 0 \\ 1 & 1 & -1 & -1 & 1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 & -1 & 0 & 0 & 2 & -1 & 0 \\ 0 & 0 & -2 & 1 & -1 & 3 & -1 & -1 \\ 0 & 1 & -2 & 0 & -1 & 4 & -1 & -1 \\ 0 & 0 & -3 & 1 & -2 & 6 & -1 & -2 \\ 0 & 0 & -3 & 1 & -1 & 4 & 0 & -2 \\ -1 & 0 & -2 & 1 & -1 & 3 & 0 & -1 \\ 0 & 0 & -2 & 1 & -1 & 2 & 0 & 0 \\ 0 & 0 & -1 & 0 & 0 & 1 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} -1 & 0 & 1 & -1 & 0 & 1 & -1 & 1 \\ -1 & 0 & 1 & -1 & 0 & 1 & -1 & 0 \\ -1 & 1 & 1 & -2 & 0 & 2 & -2 & 1 \\ -1 & 1 & 2 & -3 & 0 & 2 & -2 & 1 \\ -1 & 1 & 1 & -2 & 0 & 1 & -1 & 1 \\ -1 & 1 & 1 & -2 & 1 & 0 & -1 & 1 \\ 0 & 0 & 0 & -1 & 1 & 0 & -1 & 1 \\ 0 & 0 & 0 & -1 & 1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 1 & 1 & -1 & -1 & 1 & 1 & 0 \\ -1 & 2 & 1 & -1 & -2 & 1 & 2 & -1 \\ -2 & 2 & 2 & -2 & -2 & 2 & 2 & -1 \\ -2 & 3 & 2 & -2 & -4 & 3 & 3 & -1 \\ -2 & 2 & 1 & -1 & -3 & 2 & 3 & -1 \\ -2 & 2 & 1 & -1 & -2 & 1 & 2 & 0 \\ -1 & 1 & 1 & -1 & -1 & 0 & 2 & 0 \\ 0 & 1 & 0 & -1 & 0 & 0 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 1 & -2 & 2 & 0 & 0 & -1 \\ 0 & 0 & 1 & -2 & 2 & 0 & 1 & -3 \\ 0 & 0 & 1 & -3 & 3 & 1 & 0 & -3 \\ 1 & 0 & 1 & -4 & 4 & 1 & 1 & -5 \\ 1 & 0 & 0 & -3 & 4 & 0 & 1 & -4 \\ 0 & 0 & 0 & -2 & 3 & 0 & 1 & -3 \\ 0 & -1 & 0 & -1 & 2 & 0 & 1 & -2 \\ 0 & 0 & 0 & -1 & 1 & 0 & 1 & -1 \end{pmatrix}, \\
\begin{pmatrix} 2 & 0 & -1 & 0 & 0 & 0 & 1 & -1 \\ 2 & 0 & -1 & 0 & 0 & 0 & 1 & 0 \\ 3 & -1 & -1 & 0 & 0 & 0 & 2 & -1 \\ 4 & -1 & -2 & 0 & 0 & 1 & 2 & -1 \\ 3 & -1 & -1 & 0 & 0 & 1 & 1 & -1 \\ 2 & -1 & -1 & 1 & -1 & 1 & 1 & -1 \\ 1 & 0 & 0 & 0 & -1 & 1 & 1 & -1 \\ 1 & 0 & 0 & 0 & -1 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & -1 & 1 & -2 & 1 & 0 & 1 \\ 1 & 0 & -1 & 1 & -2 & 1 & -1 & 3 \\ 2 & 0 & -1 & 1 & -3 & 1 & 0 & 3 \\ 2 & 0 & -1 & 1 & -4 & 2 & -1 & 5 \\ 1 & 0 & 0 & 1 & -4 & 2 & -1 & 4 \\ 1 & 0 & 0 & 1 & -3 & 1 & -1 & 3 \\ 1 & 1 & 0 & 0 & -2 & 1 & -1 & 2 \\ 1 & 0 & 0 & 0 & -1 & 1 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 2 & -1 & -1 & 0 & 1 & 0 & -1 & 0 \\ 2 & -2 & -1 & 0 & 2 & 0 & -2 & 1 \\ 4 & -2 & -2 & 0 & 2 & 0 & -2 & 1 \\ 5 & -3 & -2 & -1 & 4 & 0 & -3 & 1 \\ 4 & -2 & -1 & -1 & 3 & 0 & -3 & 1 \\ 3 & -2 & -1 & 0 & 2 & 0 & -2 & 0 \\ 2 & -1 & -1 & 0 & 1 & 1 & -2 & 0 \\ 1 & -1 & 0 & 0 & 0 & 1 & -1 & 0 \end{pmatrix}, \\
\begin{pmatrix} 1 & 0 & 1 & -1 & 0 & -1 & 1 & 0 \\ 1 & 0 & 2 & -2 & 1 & -2 & 1 & 1 \\ 2 & -1 & 2 & -2 & 1 & -2 & 1 & 1 \\ 3 & 0 & 3 & -4 & 2 & -3 & 1 & 2 \\ 2 & 0 & 3 & -3 & 1 & -2 & 0 & 2 \\ 2 & 0 & 2 & -2 & 1 & -2 & 0 & 1 \\ 1 & 0 & 2 & -2 & 1 & -1 & 0 & 0 \\ 1 & 0 & 1 & -1 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -2 & 0 & 1 & -1 & 1 & 1 & -1 \\ -1 & -3 & 1 & 1 & -1 & 1 & 1 & 0 \\ 0 & -4 & 0 & 2 & -2 & 2 & 1 & 0 \\ -1 & -5 & 1 & 2 & -3 & 3 & 2 & 0 \\ -1 & -4 & 1 & 2 & -3 & 3 & 1 & 0 \\ -1 & -3 & 1 & 2 & -3 & 2 & 1 & 0 \\ -1 & -2 & 1 & 1 & -2 & 2 & 0 & 0 \\ 0 & -1 & 1 & 0 & -1 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 2 & 0 & -1 & 1 & -1 & -1 & 1 \\ 1 & 3 & -1 & -1 & 1 & -1 & -1 & 0 \\ 0 & 4 & 0 & -2 & 2 & -2 & -1 & 0 \\ 1 & 5 & -1 & -2 & 3 & -3 & -2 & 0 \\ 1 & 4 & -1 & -2 & 3 & -3 & -1 & 0 \\ 1 & 3 & -1 & -2 & 3 & -2 & -1 & 0 \\ 1 & 2 & -1 & -1 & 2 & -2 & 0 & 0 \\ 0 & 1 & -1 & 0 & 1 & -1 & 0 & 0 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} -1 & 0 & -1 & 1 & 0 & 1 & -1 & 0 \\ -1 & 0 & -2 & 2 & -1 & 2 & -1 & -1 \\ -2 & 1 & -2 & 2 & -1 & 2 & -1 & -1 \\ -3 & 0 & -3 & 4 & -2 & 3 & -1 & -2 \\ -2 & 0 & -3 & 3 & -1 & 2 & 0 & -2 \\ -2 & 0 & -2 & 2 & -1 & 2 & 0 & -1 \\ -1 & 0 & -2 & 2 & -1 & 1 & 0 & 0 \\ -1 & 0 & -1 & 1 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -2 & 0 & 1 & 0 & 0 & 0 & -1 & 1 \\ -2 & 0 & 1 & 0 & 0 & 0 & -1 & 0 \\ -3 & 1 & 1 & 0 & 0 & 0 & -2 & 1 \\ -4 & 1 & 2 & 0 & 0 & -1 & -2 & 1 \\ -3 & 1 & 1 & 0 & 0 & -1 & -1 & 1 \\ -2 & 1 & 1 & -1 & 1 & -1 & -1 & 1 \\ -1 & 0 & 0 & 0 & 1 & -1 & -1 & 1 \\ -1 & 0 & 0 & 0 & 1 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -2 & 1 & 1 & 0 & -1 & 0 & 1 & 0 \\ -2 & 2 & 1 & 0 & -2 & 0 & 2 & -1 \\ -4 & 2 & 2 & 0 & -2 & 0 & 2 & -1 \\ -5 & 3 & 2 & 1 & -4 & 0 & 3 & -1 \\ -4 & 2 & 1 & 1 & -3 & 0 & 3 & -1 \\ -3 & 2 & 1 & 0 & -2 & 0 & 2 & 0 \\ -2 & 1 & 1 & 0 & -1 & -1 & 2 & 0 \\ -1 & 1 & 0 & 0 & 0 & -1 & 1 & 0 \end{pmatrix}, \\
\begin{pmatrix} -1 & 0 & 1 & -1 & 2 & -1 & 0 & -1 \\ -1 & 0 & 1 & -1 & 2 & -1 & 1 & -3 \\ -2 & 0 & 1 & -1 & 3 & -1 & 0 & -3 \\ -2 & 0 & 1 & -1 & 4 & -2 & 1 & -5 \\ -1 & 0 & 0 & -1 & 4 & -2 & 1 & -4 \\ -1 & 0 & 0 & -1 & 3 & -1 & 1 & -3 \\ -1 & -1 & 0 & 0 & 2 & -1 & 1 & -2 \\ -1 & 0 & 0 & 0 & 1 & -1 & 1 & -1 \end{pmatrix}.$$

The character table of $G^{s_{11}}$:

	10										20														
$\chi_{11}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
$\chi_{11}^{(2)}$	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1		
$\chi_{11}^{(3)}$	1	1	1	1	1	-1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	-1	1	1	1	1		
$\chi_{11}^{(4)}$	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1		
$\chi_{11}^{(5)}$	1	A	B	/A	/B	-/B	-/A	-1	-B	-A	-1	-A	-B	-/A	-/B	/B	/A	1	B	A	1	A	B	/A	/B
$\chi_{11}^{(6)}$	1	B	/A	/B	A	-A	-/B	-1	-/A	-B	-1	-B	-/A	-/B	-A	A	/B	1	/A	B	1	B	/A	/B	A
$\chi_{11}^{(7)}$	1	/B	A	B	/A	-/A	-B	-1	-A	-/B	-1	-/B	-A	-B	-/A	/A	B	1	A	/B	1	/B	A	B	/A
$\chi_{11}^{(8)}$	1	/A	/B	A	B	-B	-A	-1	-/B	-/A	-1	-/A	-/B	-A	-B	B	A	1	/B	/A	1	/A	/B	A	B
$\chi_{11}^{(9)}$	1	A	B	/A	/B	-/B	-/A	-1	-B	-A	1	A	B	/A	/B	-/B	-/A	-1	-B	-A	1	A	B	/A	/B
$\chi_{11}^{(10)}$	1	B	/A	/B	A	-A	-/B	-1	-/A	-B	1	B	/A	/B	A	-A	-/B	-1	-/A	-B	1	B	/A	/B	A
$\chi_{11}^{(11)}$	1	/B	A	B	/A	-/A	-B	-1	-A	-/B	1	/B	A	B	/A	-/A	-B	-1	-A	-/B	1	/B	A	B	/A
$\chi_{11}^{(12)}$	1	/A	/B	A	B	-B	-A	-1	-/B	-/A	1	/A	/B	A	B	-B	-A	-1	-/B	-/A	1	/A	/B	A	B
$\chi_{11}^{(13)}$	1	A	B	/A	/B	/B	/A	1	B	A	-1	-A	-B	-/A	-/B	-/B	-/A	-1	-B	-A	1	A	B	/A	/B
$\chi_{11}^{(14)}$	1	B	/A	/B	A	A	/B	1	/A	B	-1	-B	-/A	-/B	-A	-A	-/B	-1	-/A	-B	1	B	/A	/B	A
$\chi_{11}^{(15)}$	1	/B	A	B	/A	/A	B	1	A	/B	-1	-/B	-A	-B	-/A	-/A	-B	-1	-A	-/B	1	/B	A	B	/A
$\chi_{11}^{(16)}$	1	/A	/B	A	B	B	A	1	/B	/A	-1	-/A	-/B	-A	-B	-B	-A	-1	-/B	-/A	1	/A	/B	A	B
$\chi_{11}^{(17)}$	1	A	B	/A	/B	/B	/A	1	B	A	1	A	B	/A	/B	/B	/A	1	B	A	1	A	B	/A	/B
$\chi_{11}^{(18)}$	1	B	/A	/B	A	A	/B	1	/A	B	1	B	/A	/B	A	A	/B	1	/A	B	1	B	/A	/B	A
$\chi_{11}^{(19)}$	1	/B	A	B	/A	/A	B	1	A	/B	1	/B	A	B	/A	/A	B	1	A	/B	1	/B	A	B	/A
$\chi_{11}^{(20)}$	1	/A	/B	A	B	B	A	1	/B	/A	1	/A	/B	A	B	B	A	1	/B	/A	1	/A	/B	A	B
$\chi_{11}^{(21)}$	4	4	4	4	4	4	4	4	4	4	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	1	1	1	1	1
$\chi_{11}^{(22)}$	4	4	4	4	4	4	4	4	4	4	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1
$\chi_{11}^{(23)}$	4	4	4	4	4	-4	-4	-4	-4	-4	-2	-2	-2	-2	-2	2	2	2	2	2	1	1	1	1	1
$\chi_{11}^{(24)}$	4	4	4	4	4	-4	-4	-4	-4	-4	2	2	2	2	2	-2	-2	-2	-2	-2	1	1	1	1	1
$\chi_{11}^{(25)}$	4	C	D	/C	/D	/D	/C	4	D	C	-2	I	J	/I	/J	/J	/I	-2	J	I	1	A	B	/A	/B
$\chi_{11}^{(26)}$	4	D	/C	/D	C	C	/D	4	/C	D	-2	J	/I	/J	I	I	/J	-2	/I	J	1	B	/A	/B	A
$\chi_{11}^{(27)}$	4	/D	C	D	/C	/C	D	4	C	/D	-2	/J	I	J	/I	/I	J	-2	I	/J	1	/B	A	B	/A
$\chi_{11}^{(28)}$	4	/C	/D	C	D	D	C	4	/D	/C	-2	/I	/J	I	J	J	I	-2	/J	/I	1	/A	/B	A	B
$\chi_{11}^{(29)}$	4	C	D	/C	/D	/D	/C	4	D	C	2	-I	-J	-/I	-/J	-/J	-/I	2	-J	-I	1	A	B	/A	/B
$\chi_{11}^{(30)}$	4	D	/C	/D	C	C	/D	4	/C	D	2	-J	-/I	-/J	-I	-I	-/J	2	-/I	-J	1	B	/A	/B	A
$\chi_{11}^{(31)}$	4	/D	C	D	/C	/C	D	4	C	/D	2	-/J	-I	-J	-/I	-/I	-J	2	-I	-/J	1	/B	A	B	/A
$\chi_{11}^{(32)}$	4	/C	/D	C	D	D	C	4	/D	/C	2	-/I	-/J	-I	-J	-J	-I	2	-/J	-/I	1	/A	/B	A	B
$\chi_{11}^{(33)}$	4	C	D	/C	/D	-/D	-/C	-4	-D	-C	-2	I	J	/I	/J	-/J	-/I	2	-J	-I	1	A	B	/A	/B
$\chi_{11}^{(34)}$	4	D	/C	/D	C	-C	-/D	-4	-/C	-D	-2	J	/I	/J	I	-I	-/J	2	-/I	-J	1	B	/A	/B	A
$\chi_{11}^{(35)}$	4	/D	C	D	/C	-/C	-D	-4	-C	-/D	-2	/J	I	J	/I	-/I	-J	2	-I	-/J	1	/B	A	B	/A
$\chi_{11}^{(36)}$	4	/C	/D	C	D	-D	-C	-4	-/D	-/C	-2	/I	/J	I	J	-J	-I	2	-/J	-/I	1	/A	/B	A	B
$\chi_{11}^{(37)}$	4	C	D	/C	/D	-/D	-/C	-4	-D	-C	2	-I	-J	-/I	-/J	/J	/I	-2	J	I	1	A	B	/A	/B
$\chi_{11}^{(38)}$	4	D	/C	/D	C	-C	-/D	-4	-/C	-D	2	-J	-/I	-/J	-I	I	/J	-2	/I	J	1	B	/A	/B	A
$\chi_{11}^{(39)}$	4	/D	C	D	/C	-/C	-D	-4	-C	-/D	2	-/J	-I	-J	-/I	/I	J	-2	I	/J	1	/B	A	B	/A
$\chi_{11}^{(40)}$	4	/C	/D	C	D	-D	-C	-4	-/D	-/C	2	-/I	-/J	-I	-J	J	I	-2	/J	/I	1	/A	/B	A	B
$\chi_{11}^{(41)}$	5	5	5	5	5	5	5	5	5	5	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1
$\chi_{11}^{(42)}$	5	5	5	5	5	5	5	5	5	5	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_{11}^{(43)}$	5	5	5	5	5	-5	-5	-5	-5	-5	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_{11}^{(44)}$	5	5	5	5	5	-5	-5	-5	-5	-5	-1	-1	-1	-1	-1	1	1	1	1	1	-1	-1	-1	-1	-1
$\chi_{11}^{(45)}$	5	E	F	/E	/F	/F	/E	5	F	E	1	A	B	/A	/B	/B	/A	1	B	A	-1	-A	-B	-/A	-/B

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$\chi_{11}^{(46)}$	5	F	/E	/F	E	E	/F	5	/E	F	1	B	/A	/B	A	A	/B	1	/A	B	-1	-B	-/A	-/B	-A
$\chi_{11}^{(47)}$	5	/F	E	F	/E	/E	F	5	E	/F	1	/B	A	B	/A	/A	B	1	A	/B	-1	-/B	-A	-B	-/A
$\chi_{11}^{(48)}$	5	/E	/F	E	F	F	E	5	/F	/E	1	/A	/B	A	B	B	A	1	/B	/A	-1	-/A	-/B	-A	-B
$\chi_{11}^{(49)}$	5	E	F	/E	/F	/F	/E	5	F	E	-1	-A	-B	-/A	-/B	-/B	-/A	-1	-B	-A	-1	-A	-B	-/A	-/B
$\chi_{11}^{(50)}$	5	F	/E	/F	E	E	/F	5	/E	F	-1	-B	-/A	-/B	-A	-A	-/B	-1	-/A	-B	-1	-B	-/A	-/B	-A
$\chi_{11}^{(51)}$	5	/F	E	F	/E	/E	F	5	E	/F	-1	-/B	-A	-B	-/A	-/A	-B	-1	-A	-/B	-1	-/B	-A	-B	-/A
$\chi_{11}^{(52)}$	5	/E	/F	E	F	F	E	5	/F	/E	-1	-/A	-/B	-A	-B	-B	-A	-1	-/B	-/A	-1	-/A	-/B	-A	-B
$\chi_{11}^{(53)}$	5	E	F	/E	/F	-/F	-/E	-5	-F	-E	1	A	B	/A	/B	-/B	-/A	-1	-B	-A	-1	-A	-B	-/A	-/B
$\chi_{11}^{(54)}$	5	F	/E	/F	E	-E	-/F	-5	-/E	-F	1	B	/A	/B	A	-A	-/B	-1	-/A	-B	-1	-B	-/A	-/B	-A
$\chi_{11}^{(55)}$	5	/F	E	F	/E	-/E	-F	-5	-E	-/F	1	/B	A	B	/A	-/A	-B	-1	-A	-/B	-1	-/B	-A	-B	-/A
$\chi_{11}^{(56)}$	5	/E	/F	E	F	-F	-E	-5	-/F	-/E	1	/A	/B	A	B	-B	-A	-1	-/B	-/A	-1	-/A	-/B	-A	-B
$\chi_{11}^{(57)}$	5	E	F	/E	/F	-/F	-/E	-5	-F	-E	-1	-A	-B	-/A	-/B	/B	/A	1	B	A	-1	-A	-B	-/A	-/B
$\chi_{11}^{(58)}$	5	F	/E	/F	E	-E	-/F	-5	-/E	-F	-1	-B	-/A	-/B	-A	A	/B	1	/A	B	-1	-B	-/A	-/B	-A
$\chi_{11}^{(59)}$	5	/F	E	F	/E	-/E	-F	-5	-E	-/F	-1	-/B	-A	-B	-/A	/A	B	1	A	/B	-1	-/B	-A	-B	-/A
$\chi_{11}^{(60)}$	5	/E	/F	E	F	-F	-E	-5	-/F	-/E	-1	-/A	-/B	-A	-B	B	A	1	/B	/A	-1	-/A	-/B	-A	-B
$\chi_{11}^{(61)}$	6	6	6	6	6	6	6	6	6	6	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{11}^{(62)}$	6	6	6	6	6	-6	-6	-6	-6	-6	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{11}^{(63)}$	6	G	H	/G	/H	/H	/G	6	H	G	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{11}^{(64)}$	6	H	/G	/H	G	G	/H	6	/G	H	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{11}^{(65)}$	6	/H	G	H	/G	/G	H	6	G	/H	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{11}^{(66)}$	6	/G	/H	G	H	H	G	6	/H	/G	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{11}^{(67)}$	6	G	H	/G	/H	-/H	-/G	-6	-H	-G	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{11}^{(68)}$	6	H	/G	/H	G	-G	-/H	-6	-/G	-H	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{11}^{(69)}$	6	/H	G	H	/G	-/G	-H	-6	-G	-/H	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{11}^{(70)}$	6	/G	/H	G	H	-H	-G	-6	-/H	-/G	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		30										40													
$\chi_{11}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
$\chi_{11}^{(2)}$	-1	-1	-1	-1	-1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	
$\chi_{11}^{(3)}$	-1	-1	-1	-1	-1	1	1	1	1	1	-1	-1	-1	-1	-1	1	1	1	1	1	-1	-1	-1	-1	
$\chi_{11}^{(4)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
$\chi_{11}^{(5)}$	-/B	-/A	-1	-B	-A	1	A	B	/A	/B	-/B	-/A	-1	-B	-A	-1	-A	-B	-/A	-/B	/B	/A	1	B	
$\chi_{11}^{(6)}$	-A	-/B	-1	-/A	-B	1	B	/A	/B	A	-A	-/B	-1	-/A	-B	-1	-B	-/A	-/B	-A	A	/B	1	/A	
$\chi_{11}^{(7)}$	-/A	-B	-1	-A	-/B	1	/B	A	B	/A	-/A	-B	-1	-A	-/B	-1	-/B	-A	-B	-/A	/A	B	1	A	
$\chi_{11}^{(8)}$	-B	-A	-1	-/B	-/A	1	/A	/B	A	B	-B	-A	-1	-/B	-/A	-1	-/A	-/B	-A	-B	B	A	1	/B	
$\chi_{11}^{(9)}$	-/B	-/A	-1	-B	-A	1	A	B	/A	/B	-/B	-/A	-1	-B	-A	1	A	B	/A	/B	-/B	-/A	-1	-B	
$\chi_{11}^{(10)}$	-A	-/B	-1	-/A	-B	1	B	/A	/B	A	-A	-/B	-1	-/A	-B	1	B	/A	/B	A	-A	-/B	-1	-/A	
$\chi_{11}^{(11)}$	-/A	-B	-1	-A	-/B	1	/B	A	B	/A	-/A	-B	-1	-A	-/B	1	/B	A	B	/A	-/A	-B	-1	-A	
$\chi_{11}^{(12)}$	-B	-A	-1	-/B	-/A	1	/A	/B	A	B	-B	-A	-1	-/B	-/A	1	/A	/B	A	B	-B	-A	-1	-/B	
$\chi_{11}^{(13)}$	/B	/A	1	B	A	1	A	B	/A	/B	/B	/A	1	B	A	-1	-A	-B	-/A	-/B	-/B	-/A	-1	-B	
$\chi_{11}^{(14)}$	A	/B	1	/A	B	1	B	/A	/B	A	A	/B	1	/A	B	-1	-B	-/A	-/B	-A	-A	-/B	-1	-/A	
$\chi_{11}^{(15)}$	/A	B	1	A	/B	1	/B	A	B	/A	/A	B	1	A	/B	-1	-/B	-A	-B	-/A	-/A	-B	-1	-A	
$\chi_{11}^{(16)}$	B	A	1	/B	/A	1	/A	/B	A	B	B	A	1	/B	/A	-1	-/A	-/B	-A	-B	-B	-A	-1	-/B	
$\chi_{11}^{(17)}$	/B	/A	1	B	A	1	A	B	/A	/B	/B	/A	1	B	A	1	A	B	/A	/B	/B	/A	1	B	
$\chi_{11}^{(18)}$	A	/B	1	/A	B	1	B	/A	/B	A	A	/B	1	/A	B	1	B	/A	/B	A	A	/B	1	/A	
$\chi_{11}^{(19)}$	/A	B	1	A	/B	1	/B	A	B	/A	/A	B	1	A	/B	1	/B	A	B	/A	/A	B	1	A	
$\chi_{11}^{(20)}$	B	A	1	/B	/A	1	/A	/B	A	B	B	A	1	/B	/A	1	/A	/B	A	B	B	A	1	/B	

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$\chi_{11}^{(21)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{11}^{(22)}$	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_{11}^{(23)}$	-1	-1	-1	-1	-1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_{11}^{(24)}$	-1	-1	-1	-1	-1	.	.	.	.	.	.	.	.	.	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1
$\chi_{11}^{(25)}$	/B	/A	1	B	A	.	.	.	.	.	.	.	.	.	1	A	B	/A	/B	/B	/A	1	B					
$\chi_{11}^{(26)}$	A	/B	1	/A	B	.	.	.	.	.	.	.	.	.	1	B	/A	/B	A	A	/B	1	/A					
$\chi_{11}^{(27)}$	/A	B	1	A	/B	.	.	.	.	.	.	.	.	.	1	/B	A	B	/A	/A	B	1	A					
$\chi_{11}^{(28)}$	B	A	1	/B	/A	.	.	.	.	.	.	.	.	.	1	/A	/B	A	B	B	A	1	/B					
$\chi_{11}^{(29)}$	/B	/A	1	B	A	.	.	.	.	.	.	.	.	.	-1	-A	-B	-A	-B	-A	-B	-A	-1	-B				
$\chi_{11}^{(30)}$	A	/B	1	/A	B	.	.	.	.	.	.	.	.	.	-1	-B	-A	-B	-A	-A	-B	-1	-A					
$\chi_{11}^{(31)}$	/A	B	1	A	/B	.	.	.	.	.	.	.	.	.	-1	-B	-A	-B	-A	-A	-B	-1	-A					
$\chi_{11}^{(32)}$	B	A	1	/B	/A	.	.	.	.	.	.	.	.	.	-1	-A	-B	-A	-B	-B	-A	-1	-B					
$\chi_{11}^{(33)}$	-/B	-/A	-1	-B	-A	.	.	.	.	.	.	.	.	.	1	A	B	/A	/B	-/B	-/A	-1	-B					
$\chi_{11}^{(34)}$	-A	-/B	-1	-/A	-B	.	.	.	.	.	.	.	.	.	1	B	/A	/B	A	-A	-/B	-1	-A					
$\chi_{11}^{(35)}$	-/A	-B	-1	-A	-/B	.	.	.	.	.	.	.	.	.	1	/B	A	B	/A	-/A	-B	-1	-A					
$\chi_{11}^{(36)}$	-B	-A	-1	-/B	-/A	.	.	.	.	.	.	.	.	.	1	/A	/B	A	B	-B	-A	-1	-/B					
$\chi_{11}^{(37)}$	-/B	-/A	-1	-B	-A	.	.	.	.	.	.	.	.	.	-1	-A	-B	-A	-/B	/B	/A	1	B					
$\chi_{11}^{(38)}$	-A	-/B	-1	-/A	-B	.	.	.	.	.	.	.	.	.	-1	-B	-A	-/B	-A	A	/B	1	/A					
$\chi_{11}^{(39)}$	-/A	-B	-1	-A	-/B	.	.	.	.	.	.	.	.	.	-1	-/B	-A	-B	-/A	/A	B	1	A					
$\chi_{11}^{(40)}$	-B	-A	-1	-/B	-/A	.	.	.	.	.	.	.	.	.	-1	-A	-/B	-A	-B	B	A	1	/B					
$\chi_{11}^{(41)}$	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{11}^{(42)}$	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_{11}^{(43)}$	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_{11}^{(44)}$	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1
$\chi_{11}^{(45)}$	-/B	-/A	-1	-B	-A	1	A	B	/A	/B	/B	/A	1	B	A	1	A	B	/A	/B	/B	/A	1	B				
$\chi_{11}^{(46)}$	-A	-/B	-1	-/A	-B	1	B	/A	/B	A	A	/B	1	/A	B	1	B	/A	/B	A	A	/B	1	/A				
$\chi_{11}^{(47)}$	-/A	-B	-1	-A	-/B	1	/B	A	B	/A	/A	B	1	A	/B	1	/B	A	B	/A	/A	B	1	A				
$\chi_{11}^{(48)}$	-B	-A	-1	-/B	-/A	1	/A	/B	A	B	B	A	1	/B	/A	1	/A	/B	A	B	B	A	1	/B				
$\chi_{11}^{(49)}$	-/B	-/A	-1	-B	-A	1	A	B	/A	/B	/B	/A	1	B	A	-1	-A	-B	-A	-/B	-/B	-/A	-1	-B				
$\chi_{11}^{(50)}$	-A	-/B	-1	-/A	-B	1	B	/A	/B	A	A	/B	1	/A	B	-1	-B	-A	-/B	-A	-A	-/B	-1	-A				
$\chi_{11}^{(51)}$	-/A	-B	-1	-A	-/B	1	/B	A	B	/A	/A	B	1	A	/B	-1	-/B	-A	-B	-/A	-/A	-B	-1	-A				
$\chi_{11}^{(52)}$	-B	-A	-1	-/B	-/A	1	/A	/B	A	B	B	A	1	/B	/A	-1	-A	-B	-A	-B	-B	-A	-1	-/B				
$\chi_{11}^{(53)}$	/B	/A	1	B	A	1	A	B	/A	/B	-/B	-/A	-1	-B	-A	1	A	B	/A	/B	-/B	-/A	-1	-B				
$\chi_{11}^{(54)}$	A	/B	1	/A	B	1	B	/A	/B	A	-A	-/B	-1	-A	-B	1	B	/A	/B	A	-A	-/B	-1	-A				
$\chi_{11}^{(55)}$	/A	B	1	A	/B	1	/B	A	B	/A	-/A	-B	-1	-A	-/B	1	/B	A	B	/A	-/A	-B	-1	-A				
$\chi_{11}^{(56)}$	B	A	1	/B	/A	1	/A	/B	A	B	-B	-A	-1	-/B	-/A	1	/A	/B	A	B	-B	-A	-1	-/B				
$\chi_{11}^{(57)}$	/B	/A	1	B	A	1	A	B	/A	/B	-/B	-/A	-1	-B	-A	-1	-A	-B	-A	-/B	/B	/A	1	B				
$\chi_{11}^{(58)}$	A	/B	1	/A	B	1	B	/A	/B	A	-A	-/B	-1	-A	-B	-1	-B	-A	-/B	-A	A	/B	1	/A				
$\chi_{11}^{(59)}$	/A	B	1	A	/B	1	/B	A	B	/A	-/A	-B	-1	-A	-/B	-1	-/B	-A	-B	-/A	/A	B	1	A				
$\chi_{11}^{(60)}$	B	A	1	/B	/A	1	/A	/B	A	B	-B	-A	-1	-/B	-/A	-1	-A	-/B	-A	-B	B	A	1	/B				
$\chi_{11}^{(61)}$	.	.	.	.	.	-2	-2	-2	-2	-2	-2	-2	-2	-2	.	.	.	.	.	.	.	.	.	.
$\chi_{11}^{(62)}$	.	.	.	.	.	-2	-2	-2	-2	-2	2	2	2	2	2	.	.	.	.	.	.	.	.	.
$\chi_{11}^{(63)}$	.	.	.	.	.	-2	I	J	/I	/J	/J	/I	-2	J	I	.	.	.	.	.	.	.	.	.
$\chi_{11}^{(64)}$	.	.	.	.	.	-2	J	/I	/J	I	I	/J	-2	/I	J	.	.	.	.	.	.	.	.	.
$\chi_{11}^{(65)}$	.	.	.	.	.	-2	/J	I	J	/I	/I	J	-2	I	/J	.	.	.	.	.	.	.	.	.
$\chi_{11}^{(66)}$	.	.	.	.	.	-2	/I	/J	I	J	J	I	-2	/J	/I	.	.	.	.	.	.	.	.	.
$\chi_{11}^{(67)}$	.	.	.	.	.	-2	I	J	/I	/J	-/J	-/I	2	-J	-I	.	.	.	.	.	.	.	.	.
$\chi_{11}^{(68)}$	.	.	.	.	.	-2	J	/I	/J	I	-I	-/J	2	-/I	-J	.	.	.	.	.	.	.	.	.
$\chi_{11}^{(69)}$	.	.	.	.	.	-2	/J	I	J	/I	-/I	-J	2	-/J	-/J	.	.	.	.	.	.	.	.	.
$\chi_{11}^{(70)}$	.	.	.	.	.	-2	/I	/J	I	J	-J	-I	2	-/J	-/I	.	.	.	.	.	.	.	.	.

$\chi_{11}^{(46)}$	B	-1	-B	-/A	-/B	-A	-A	-/B	-1	-/A	-B	.	.	.	.	.	.	.	.	.
$\chi_{11}^{(47)}$	/B	-1	-/B	-A	-B	-/A	-/A	-B	-1	-A	-/B	.	.	.	.	.	.	.	.	.
$\chi_{11}^{(48)}$	/A	-1	-/A	-/B	-A	-B	-B	-A	-1	-/B	-/A	.	.	.	.	.	.	.	.	.
$\chi_{11}^{(49)}$	-A	1	A	B	/A	/B	/B	/A	1	B	A	.	.	.	.	.	.	.	.	.
$\chi_{11}^{(50)}$	-B	1	B	/A	/B	A	A	/B	1	/A	B	.	.	.	.	.	.	.	.	.
$\chi_{11}^{(51)}$	-/B	1	/B	A	B	/A	/A	B	1	A	/B	.	.	.	.	.	.	.	.	.
$\chi_{11}^{(52)}$	-/A	1	/A	/B	A	B	B	A	1	/B	/A	.	.	.	.	.	.	.	.	.
$\chi_{11}^{(53)}$	-A	-1	-A	-B	-/A	-/B	/B	/A	1	B	A	.	.	.	.	.	.	.	.	.
$\chi_{11}^{(54)}$	-B	-1	-B	-/A	-/B	-A	A	/B	1	/A	B	.	.	.	.	.	.	.	.	.
$\chi_{11}^{(55)}$	-/B	-1	-/B	-A	-B	-/A	/A	B	1	A	/B	.	.	.	.	.	.	.	.	.
$\chi_{11}^{(56)}$	-/A	-1	-/A	-/B	-A	-B	B	A	1	/B	/A	.	.	.	.	.	.	.	.	.
$\chi_{11}^{(57)}$	A	1	A	B	/A	/B	-/B	-/A	-1	-B	-A	.	.	.	.	.	.	.	.	.
$\chi_{11}^{(58)}$	B	1	B	/A	/B	A	-A	-/B	-1	-/A	-B	.	.	.	.	.	.	.	.	.
$\chi_{11}^{(59)}$	/B	1	/B	A	B	/A	-/A	-B	-1	-A	-/B	.	.	.	.	.	.	.	.	.
$\chi_{11}^{(60)}$	/A	1	/A	/B	A	B	-B	-A	-1	-/B	-/A	.	.	.	.	.	.	.	.	.
$\chi_{11}^{(61)}$	.	.	.	.	.	.	.	.	.	.	.	1	1	1	1	1	1	1	1	1
$\chi_{11}^{(62)}$	.	.	.	.	.	.	.	.	.	.	.	1	1	1	1	1	-1	-1	-1	-1
$\chi_{11}^{(63)}$	.	.	.	.	.	.	.	.	.	.	.	1	A	B	/A	/B	/B	/A	1	B
$\chi_{11}^{(64)}$	.	.	.	.	.	.	.	.	.	.	.	1	B	/A	/B	A	A	/B	1	/A
$\chi_{11}^{(65)}$	.	.	.	.	.	.	.	.	.	.	.	1	/B	A	B	/A	/A	B	1	A
$\chi_{11}^{(66)}$	.	.	.	.	.	.	.	.	.	.	.	1	/A	/B	A	B	B	A	1	/B
$\chi_{11}^{(67)}$	.	.	.	.	.	.	.	.	.	.	.	1	A	B	/A	/B	-/B	-/A	-1	-B
$\chi_{11}^{(68)}$	.	.	.	.	.	.	.	.	.	.	.	1	B	/A	/B	A	-A	-/B	-1	-/A
$\chi_{11}^{(69)}$	.	.	.	.	.	.	.	.	.	.	.	1	/B	A	B	/A	-/A	-B	-1	-A
$\chi_{11}^{(70)}$	.	.	.	.	.	.	.	.	.	.	.	1	/A	/B	A	B	-B	-A	-1	-/B

where $A = E(5)^4, B = E(5)^3, C = 4^*E(5)^4, D = 4^*E(5)^3, E = 5^*E(5)^4, F = 5^*E(5)^3, G = 6^*E(5)^4, H = 6^*E(5)^3, I = -2^*E(5)^4, J = -2^*E(5)^3$.

The generators of $G^{s_{12}}$ are:

$$\begin{pmatrix} 1 & -1 & -2 & 2 & 0 & 0 & -1 & 0 \\ 2 & -1 & -2 & 2 & 0 & 0 & -2 & 1 \\ 3 & -1 & -4 & 3 & 0 & 0 & -2 & 1 \\ 4 & -1 & -5 & 4 & 0 & 0 & -3 & 1 \\ 3 & -1 & -4 & 3 & 1 & -1 & -2 & 1 \\ 3 & -1 & -3 & 2 & 1 & -1 & -1 & 0 \\ 2 & 0 & -2 & 1 & 1 & -1 & -1 & 0 \\ 1 & 0 & -1 & 1 & 0 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 & -1 & 1 & 0 & 1 & -2 & 0 \\ 1 & 0 & -2 & 2 & 0 & 0 & -2 & 0 \\ 1 & 1 & -3 & 2 & 0 & 1 & -3 & 0 \\ 2 & 1 & -4 & 3 & 0 & 1 & -4 & 0 \\ 1 & 1 & -3 & 2 & 1 & 0 & -3 & 0 \\ 1 & 1 & -2 & 1 & 1 & 0 & -2 & -1 \\ 1 & 1 & -1 & 0 & 1 & 0 & -2 & 0 \\ 0 & 1 & 0 & 0 & 0 & 0 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & -1 & -1 & 1 & 0 & 1 & -2 & 1 \\ 1 & 0 & -1 & 1 & 0 & 1 & -3 & 1 \\ 2 & 0 & -2 & 1 & 0 & 2 & -4 & 2 \\ 3 & 0 & -3 & 2 & 0 & 2 & -5 & 2 \\ 2 & 0 & -2 & 1 & 1 & 1 & -4 & 2 \\ 2 & 0 & -1 & 0 & 1 & 1 & -3 & 1 \\ 2 & 0 & -1 & 0 & 1 & 0 & -2 & 1 \\ 1 & 0 & 0 & 0 & 0 & 0 & -1 & 1 \end{pmatrix}, \\
\begin{pmatrix} -1 & 1 & 1 & -1 & 0 & -1 & 2 & -1 \\ -1 & 0 & 1 & -1 & 0 & -1 & 3 & -1 \\ -2 & 0 & 2 & -1 & 0 & -2 & 4 & -2 \\ -3 & 0 & 3 & -2 & 0 & -2 & 5 & -2 \\ -2 & 0 & 2 & -1 & -1 & -1 & 4 & -2 \\ -2 & 0 & 1 & 0 & -1 & -1 & 3 & -1 \\ -2 & 0 & 1 & 0 & -1 & 0 & 2 & -1 \\ -1 & 0 & 0 & 0 & 0 & 0 & 1 & -1 \end{pmatrix}, \begin{pmatrix} -1 & 1 & 2 & -2 & 0 & 0 & 1 & 0 \\ -2 & 1 & 2 & -2 & 0 & 0 & 2 & -1 \\ -3 & 1 & 4 & -3 & 0 & 0 & 2 & -1 \\ -4 & 1 & 5 & -4 & 0 & 0 & 3 & -1 \\ -3 & 1 & 4 & -3 & -1 & 1 & 2 & -1 \\ -3 & 1 & 3 & -2 & -1 & 1 & 1 & 0 \\ -2 & 0 & 2 & -1 & -1 & 1 & 1 & 0 \\ -1 & 0 & 1 & -1 & 0 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 1 & -1 & 0 & -1 & 2 & 0 \\ -1 & 0 & 2 & -2 & 0 & 0 & 2 & 0 \\ -1 & -1 & 3 & -2 & 0 & -1 & 3 & 0 \\ -2 & -1 & 4 & -3 & 0 & -1 & 4 & 0 \\ -1 & -1 & 3 & -2 & -1 & 0 & 3 & 0 \\ -1 & -1 & 2 & -1 & -1 & 0 & 2 & 1 \\ -1 & -1 & 1 & 0 & -1 & 0 & 2 & 0 \\ 0 & -1 & 0 & 0 & 0 & 0 & 1 & 0 \end{pmatrix}, \\
\begin{pmatrix} 0 & -1 & 0 & 1 & -1 & 1 & 0 & 0 \\ -1 & -1 & 0 & 2 & -2 & 2 & -1 & 0 \\ -1 & -2 & 1 & 2 & -2 & 2 & -1 & 0 \\ -1 & -3 & 0 & 4 & -3 & 3 & -2 & 0 \\ -1 & -2 & 0 & 3 & -2 & 2 & -2 & 1 \\ -1 & -2 & 0 & 2 & -1 & 2 & -2 & 1 \\ -1 & -2 & 0 & 2 & -1 & 1 & -1 & 1 \\ 0 & -1 & 0 & 1 & -1 & 1 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 0 & -1 & -1 & 2 & -1 & 0 & 1 & -1 \\ 0 & -2 & -1 & 3 & -2 & 1 & 0 & 0 \\ 0 & -3 & -1 & 4 & -2 & 0 & 1 & -1 \\ 0 & -4 & -2 & 6 & -3 & 1 & 0 & -1 \\ 0 & -3 & -2 & 5 & -2 & 0 & 0 & 0 \\ 0 & -3 & -2 & 4 & -1 & 0 & 0 & 0 \\ -1 & -2 & -1 & 3 & -1 & 0 & 0 & 0 \\ 0 & -1 & -1 & 2 & -1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 0 & 1 & -1 & 1 & 0 & -1 \\ -1 & -1 & -1 & 3 & -2 & 1 & 0 & -1 \\ -2 & -1 & 0 & 3 & -2 & 1 & 0 & -2 \\ -2 & -2 & -1 & 5 & -3 & 2 & -1 & -2 \\ -2 & -1 & -1 & 4 & -2 & 1 & -1 & -1 \\ -2 & -1 & -1 & 3 & -1 & 1 & -1 & -1 \\ -2 & -1 & 0 & 2 & -1 & 1 & -1 & 0 \\ -1 & 0 & 0 & 1 & -1 & 1 & -1 & 0 \end{pmatrix}, \\
\begin{pmatrix} 1 & 0 & 0 & -1 & 1 & -1 & 0 & 1 \\ 1 & 1 & 1 & -3 & 2 & -1 & 0 & 1 \\ 2 & 1 & 0 & -3 & 2 & -1 & 0 & 2 \\ 2 & 2 & 1 & -5 & 3 & -2 & 1 & 2 \\ 2 & 1 & 1 & -4 & 2 & -1 & 1 & 1 \\ 2 & 1 & 1 & -3 & 1 & -1 & 1 & 1 \\ 2 & 1 & 0 & -2 & 1 & -1 & 1 & 0 \\ 1 & 0 & 0 & -1 & 1 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 0 & -1 & 1 & -1 & 0 & 0 \\ 1 & 1 & 0 & -2 & 2 & -2 & 1 & 0 \\ 1 & 2 & -1 & -2 & 2 & -2 & 1 & 0 \\ 1 & 3 & 0 & -4 & 3 & -3 & 2 & 0 \\ 1 & 2 & 0 & -3 & 2 & -2 & 2 & -1 \\ 1 & 2 & 0 & -2 & 1 & -2 & 2 & -1 \\ 1 & 2 & 0 & -2 & 1 & -1 & 1 & -1 \\ 0 & 1 & 0 & -1 & 1 & -1 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 1 & -2 & 1 & 0 & -1 & 1 \\ 0 & 2 & 1 & -3 & 2 & -1 & 0 & 0 \\ 0 & 3 & 1 & -4 & 2 & 0 & -1 & 1 \\ 0 & 4 & 2 & -6 & 3 & -1 & 0 & 1 \\ 0 & 3 & 2 & -5 & 2 & 0 & 0 & 0 \\ 0 & 3 & 2 & -4 & 1 & 0 & 0 & 0 \\ 1 & 2 & 1 & -3 & 1 & 0 & 0 & 0 \\ 0 & 1 & 1 & -2 & 1 & 0 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 0 & -2 & 0 & 1 & 0 & 1 & -1 & 0 \\ 0 & -2 & 0 & 1 & 0 & 2 & -2 & -1 \\ 0 & -3 & 1 & 1 & 0 & 2 & -2 & -1 \\ 1 & -4 & 0 & 2 & 0 & 3 & -3 & -2 \\ 1 & -3 & 0 & 2 & -1 & 3 & -3 & -1 \\ 1 & -2 & 0 & 1 & 0 & 2 & -3 & 0 \\ 1 & -2 & 0 & 1 & 0 & 1 & -2 & 0 \\ 1 & -1 & 0 & 0 & 0 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -2 & -1 & 2 & 0 & 0 & 0 & -1 \\ 1 & -3 & -1 & 2 & 0 & 1 & -1 & -1 \\ 1 & -4 & -1 & 3 & 0 & 0 & 0 & -2 \\ 2 & -5 & -2 & 4 & 0 & 1 & -1 & -3 \\ 2 & -4 & -2 & 4 & -1 & 1 & -1 & -2 \\ 2 & -3 & -2 & 3 & 0 & 0 & -1 & -1 \\ 1 & -2 & -1 & 2 & 0 & 0 & -1 & -1 \\ 1 & -1 & -1 & 1 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 0 & 1 & 0 & 1 & -1 & -1 \\ 0 & -2 & -1 & 2 & 0 & 1 & -1 & -2 \\ -1 & -2 & 0 & 2 & 0 & 1 & -1 & -3 \\ 0 & -3 & -1 & 3 & 0 & 2 & -2 & -4 \\ 0 & -2 & -1 & 3 & -1 & 2 & -2 & -3 \\ 0 & -1 & -1 & 2 & 0 & 1 & -2 & -2 \\ 0 & -1 & 0 & 1 & 0 & 1 & -2 & -1 \\ 0 & 0 & 0 & 0 & 0 & 1 & -1 & -1 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} 1 & 1 & 0 & -1 & 0 & -1 & 1 & 1 \\ 0 & 2 & 1 & -2 & 0 & -1 & 1 & 2 \\ 1 & 2 & 0 & -2 & 0 & -1 & 1 & 3 \\ 0 & 3 & 1 & -3 & 0 & -2 & 2 & 4 \\ 0 & 2 & 1 & -3 & 1 & -2 & 2 & 3 \\ 0 & 1 & 1 & -2 & 0 & -1 & 2 & 2 \\ 0 & 1 & 0 & -1 & 0 & -1 & 2 & 1 \\ 0 & 0 & 0 & 0 & 0 & -1 & 1 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 2 & 0 & -1 & 0 & -1 & 1 & 0 \\ 0 & 2 & 0 & -1 & 0 & -2 & 2 & 1 \\ 0 & 3 & -1 & -1 & 0 & -2 & 2 & 1 \\ -1 & 4 & 0 & -2 & 0 & -3 & 3 & 2 \\ -1 & 3 & 0 & -2 & 1 & -3 & 3 & 1 \\ -1 & 2 & 0 & -1 & 0 & -2 & 3 & 0 \\ -1 & 2 & 0 & -1 & 0 & -1 & 2 & 0 \\ -1 & 1 & 0 & 0 & 0 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 2 & 1 & -2 & 0 & 0 & 0 & 1 \\ -1 & 3 & 1 & -2 & 0 & -1 & 1 & 1 \\ -1 & 4 & 1 & -3 & 0 & 0 & 0 & 2 \\ -2 & 5 & 2 & -4 & 0 & -1 & 1 & 3 \\ -2 & 4 & 2 & -4 & 1 & -1 & 1 & 2 \\ -2 & 3 & 2 & -3 & 0 & 0 & 1 & 1 \\ -1 & 2 & 1 & -2 & 0 & 0 & 1 & 1 \\ -1 & 1 & 1 & -1 & 0 & 0 & 0 & 1 \end{pmatrix}, \\
\begin{pmatrix} -1 & -1 & 1 & -1 & 1 & 1 & -1 & 0 \\ -1 & -1 & 0 & -1 & 2 & 1 & -1 & -1 \\ -2 & -2 & 1 & -1 & 2 & 2 & -2 & -1 \\ -2 & -3 & 0 & -1 & 3 & 3 & -3 & -1 \\ -1 & -2 & 0 & -1 & 2 & 3 & -3 & -1 \\ -1 & -1 & 0 & -1 & 1 & 3 & -2 & -1 \\ 0 & -1 & 0 & -1 & 1 & 2 & -1 & -1 \\ 0 & 0 & 0 & -1 & 1 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -2 & 0 & 0 & 1 & 0 & 0 & 0 \\ 0 & -2 & 0 & -1 & 2 & 1 & -1 & 0 \\ 0 & -4 & 0 & 0 & 2 & 1 & -1 & 0 \\ 0 & -5 & -1 & 0 & 3 & 2 & -2 & 0 \\ 1 & -4 & -1 & 0 & 2 & 2 & -2 & 0 \\ 1 & -3 & -1 & 0 & 1 & 2 & -1 & 0 \\ 1 & -2 & -1 & 0 & 1 & 1 & 0 & -1 \\ 1 & -1 & -1 & 0 & 1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 0 & 0 & 1 & 0 & 0 & -1 \\ 0 & -2 & -1 & 0 & 2 & 0 & 0 & -1 \\ -1 & -3 & -1 & 1 & 2 & 0 & 0 & -2 \\ -1 & -4 & -2 & 1 & 3 & 1 & -1 & -2 \\ 0 & -3 & -2 & 1 & 2 & 1 & -1 & -2 \\ 0 & -2 & -2 & 1 & 1 & 1 & 0 & -2 \\ 0 & -1 & -1 & 0 & 1 & 1 & 0 & -2 \\ 0 & 0 & -1 & 0 & 1 & 0 & 0 & -1 \end{pmatrix}, \\
\begin{pmatrix} 1 & 1 & 0 & 0 & -1 & 0 & 0 & 1 \\ 0 & 2 & 1 & 0 & -2 & 0 & 0 & 1 \\ 1 & 3 & 1 & -1 & -2 & 0 & 0 & 2 \\ 1 & 4 & 2 & -1 & -3 & -1 & 1 & 2 \\ 0 & 3 & 2 & -1 & -2 & -1 & 1 & 2 \\ 0 & 2 & 2 & -1 & -1 & -1 & 0 & 2 \\ 0 & 1 & 1 & 0 & -1 & -1 & 0 & 2 \\ 0 & 0 & 1 & 0 & -1 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 1 & 1 & -1 & 1 & -1 & -1 & 1 & 0 \\ 1 & 1 & 0 & 1 & -2 & -1 & 1 & 1 \\ 2 & 2 & -1 & 1 & -2 & -2 & 2 & 1 \\ 2 & 3 & 0 & 1 & -3 & -3 & 3 & 1 \\ 1 & 2 & 0 & 1 & -2 & -3 & 3 & 1 \\ 1 & 1 & 0 & 1 & -1 & -3 & 2 & 1 \\ 0 & 1 & 0 & 1 & -1 & -2 & 1 & 1 \\ 0 & 0 & 0 & 1 & -1 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 2 & 0 & 0 & -1 & 0 & 0 & 0 \\ 0 & 2 & 0 & 1 & -2 & -1 & 1 & 0 \\ 0 & 4 & 0 & 0 & -2 & -1 & 1 & 0 \\ 0 & 5 & 1 & 0 & -3 & -2 & 2 & 0 \\ -1 & 4 & 1 & 0 & -2 & -2 & 2 & 0 \\ -1 & 3 & 1 & 0 & -1 & -2 & 1 & 0 \\ -1 & 2 & 1 & 0 & -1 & -1 & 0 & 1 \\ -1 & 1 & 1 & 0 & -1 & 0 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 1 & 0 & 0 & 1 & -2 & 1 & -1 & 1 \\ 1 & 1 & 0 & 1 & -3 & 2 & -2 & 1 \\ 1 & 0 & 0 & 2 & -4 & 3 & -3 & 2 \\ 2 & 1 & -1 & 3 & -6 & 4 & -4 & 3 \\ 1 & 1 & 0 & 2 & -5 & 3 & -3 & 3 \\ 1 & 1 & 0 & 1 & -4 & 3 & -2 & 2 \\ 1 & 0 & 0 & 1 & -3 & 2 & -1 & 1 \\ 1 & 0 & 0 & 0 & -1 & 1 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & -1 & 2 & -2 & 0 & 0 & 0 \\ 2 & 0 & -1 & 2 & -3 & 1 & -1 & 1 \\ 2 & -1 & -2 & 4 & -4 & 1 & -1 & 1 \\ 3 & 0 & -3 & 5 & -6 & 2 & -2 & 2 \\ 2 & 0 & -2 & 4 & -5 & 1 & -1 & 2 \\ 2 & 0 & -2 & 3 & -4 & 1 & 0 & 1 \\ 1 & 0 & -1 & 2 & -3 & 1 & 0 & 0 \\ 1 & 0 & -1 & 1 & -1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 0 & 1 & -2 & 1 & -1 & 0 \\ 1 & 1 & -1 & 2 & -3 & 1 & -1 & 0 \\ 0 & 1 & -1 & 3 & -4 & 2 & -2 & 0 \\ 1 & 2 & -2 & 4 & -6 & 3 & -3 & 1 \\ 0 & 2 & -1 & 3 & -5 & 2 & -2 & 1 \\ 0 & 2 & -1 & 2 & -4 & 2 & -1 & 0 \\ 0 & 1 & 0 & 1 & -3 & 2 & -1 & 0 \\ 0 & 1 & 0 & 0 & -1 & 1 & -1 & 0 \end{pmatrix}, \\
\begin{pmatrix} 0 & -1 & 0 & -1 & 2 & -1 & 1 & 0 \\ -1 & -1 & 1 & -2 & 3 & -1 & 1 & 0 \\ 0 & -1 & 1 & -3 & 4 & -2 & 2 & 0 \\ -1 & -2 & 2 & -4 & 6 & -3 & 3 & -1 \\ 0 & -2 & 1 & -3 & 5 & -2 & 2 & -1 \\ 0 & -2 & 1 & -2 & 4 & -2 & 1 & 0 \\ 0 & -1 & 0 & -1 & 3 & -2 & 1 & 0 \\ 0 & -1 & 0 & 0 & 1 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 0 & -1 & 2 & -1 & 1 & -1 \\ -1 & -1 & 0 & -1 & 3 & -2 & 2 & -1 \\ -1 & 0 & 0 & -2 & 4 & -3 & 3 & -2 \\ -2 & -1 & 1 & -3 & 6 & -4 & 4 & -3 \\ -1 & -1 & 0 & -2 & 5 & -3 & 3 & -3 \\ -1 & -1 & 0 & -1 & 4 & -3 & 2 & -2 \\ -1 & 0 & 0 & -1 & 3 & -2 & 1 & -1 \\ -1 & 0 & 0 & 0 & 1 & -1 & 1 & -1 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 1 & -2 & 2 & 0 & 0 & 0 \\ -2 & 0 & 1 & -2 & 3 & -1 & 1 & -1 \\ -2 & 1 & 2 & -4 & 4 & -1 & 1 & -1 \\ -3 & 0 & 3 & -5 & 6 & -2 & 2 & -2 \\ -2 & 0 & 2 & -4 & 5 & -1 & 1 & -2 \\ -2 & 0 & 2 & -3 & 4 & -1 & 0 & -1 \\ -1 & 0 & 1 & -2 & 3 & -1 & 0 & 0 \\ -1 & 0 & 1 & -1 & 1 & 0 & 0 & 0 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} 0 & -1 & 1 & -1 & 1 & -1 & 1 & 0 \\ 0 & 0 & 2 & -3 & 2 & -1 & 1 & 0 \\ 0 & -1 & 3 & -3 & 2 & -2 & 2 & 0 \\ 0 & 0 & 4 & -5 & 3 & -3 & 3 & 0 \\ 0 & 0 & 3 & -4 & 3 & -3 & 2 & 1 \\ 1 & 0 & 2 & -3 & 2 & -2 & 1 & 1 \\ 1 & 0 & 1 & -2 & 2 & -2 & 1 & 0 \\ 1 & 0 & 0 & -1 & 1 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 1 & -1 & 1 & -1 & 1 & -1 \\ 0 & 0 & 1 & -2 & 2 & -2 & 2 & -1 \\ -1 & 0 & 2 & -2 & 2 & -3 & 3 & -2 \\ -1 & 1 & 3 & -4 & 3 & -4 & 4 & -2 \\ -1 & 1 & 2 & -3 & 3 & -4 & 3 & -1 \\ 0 & 1 & 1 & -2 & 2 & -3 & 2 & -1 \\ 0 & 1 & 1 & -2 & 2 & -2 & 1 & -1 \\ 0 & 1 & 0 & -1 & 1 & -1 & 1 & -1 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 2 & -2 & 1 & 0 & 0 & 0 \\ -1 & 1 & 2 & -3 & 2 & -1 & 1 & -1 \\ -2 & 1 & 4 & -4 & 2 & -1 & 1 & -1 \\ -2 & 2 & 5 & -6 & 3 & -2 & 2 & -1 \\ -2 & 2 & 4 & -5 & 3 & -2 & 1 & 0 \\ -1 & 2 & 3 & -4 & 2 & -1 & 0 & 0 \\ 0 & 1 & 2 & -3 & 2 & -1 & 0 & 0 \\ 0 & 1 & 1 & -2 & 1 & 0 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 1 & 0 & -2 & 2 & -1 & 0 & 0 & 0 \\ 1 & -1 & -2 & 3 & -2 & 1 & -1 & 1 \\ 2 & -1 & -4 & 4 & -2 & 1 & -1 & 1 \\ 2 & -2 & -5 & 6 & -3 & 2 & -2 & 1 \\ 2 & -2 & -4 & 5 & -3 & 2 & -1 & 0 \\ 1 & -2 & -3 & 4 & -2 & 1 & 0 & 0 \\ 0 & -1 & -2 & 3 & -2 & 1 & 0 & 0 \\ 0 & -1 & -1 & 2 & -1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 1 & -1 & 1 & -1 & 1 & -1 & 0 \\ 0 & 0 & -2 & 3 & -2 & 1 & -1 & 0 \\ 0 & 1 & -3 & 3 & -2 & 2 & -2 & 0 \\ 0 & 0 & -4 & 5 & -3 & 3 & -3 & 0 \\ 0 & 0 & -3 & 4 & -3 & 3 & -2 & -1 \\ -1 & 0 & -2 & 3 & -2 & 2 & -1 & -1 \\ -1 & 0 & -1 & 2 & -2 & 2 & -1 & 0 \\ -1 & 0 & 0 & 1 & -1 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & -1 & 1 & -1 & 1 & -1 & 1 \\ 0 & 0 & -1 & 2 & -2 & 2 & -2 & 1 \\ 1 & 0 & -2 & 2 & -2 & 3 & -3 & 2 \\ 1 & -1 & -3 & 4 & -3 & 4 & -4 & 2 \\ 1 & -1 & -2 & 3 & -3 & 4 & -3 & 1 \\ 0 & -1 & -1 & 2 & -2 & 3 & -2 & 1 \\ 0 & -1 & -1 & 2 & -2 & 2 & -1 & 1 \\ 0 & -1 & 0 & 1 & -1 & 1 & -1 & 1 \end{pmatrix}, \\
\begin{pmatrix} 0 & -1 & -1 & 2 & 0 & -1 & 0 & 0 \\ 0 & -2 & -1 & 2 & 1 & -1 & -1 & 1 \\ 0 & -3 & -1 & 3 & 1 & -2 & 0 & 0 \\ 0 & -4 & -2 & 4 & 2 & -2 & -1 & 0 \\ 0 & -3 & -2 & 3 & 2 & -2 & 0 & 0 \\ 0 & -3 & -2 & 3 & 1 & -1 & 0 & 0 \\ -1 & -2 & -1 & 2 & 1 & -1 & 0 & 0 \\ 0 & -1 & -1 & 1 & 1 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 0 & 1 & 0 & 0 & -1 & 0 \\ -1 & -1 & -1 & 2 & 1 & -1 & -1 & 0 \\ -2 & -1 & 0 & 2 & 1 & -1 & -1 & -1 \\ -2 & -2 & -1 & 3 & 2 & -1 & -2 & -1 \\ -2 & -1 & -1 & 2 & 2 & -1 & -1 & -1 \\ -2 & -1 & -1 & 2 & 1 & 0 & -1 & -1 \\ -2 & -1 & 0 & 1 & 1 & 0 & -1 & 0 \\ -1 & 0 & 0 & 0 & 1 & 0 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 0 & 1 & 0 & 0 & -1 & 1 \\ -1 & -1 & 0 & 1 & 1 & 0 & -2 & 1 \\ -1 & -2 & 1 & 1 & 1 & 0 & -2 & 1 \\ -1 & -3 & 0 & 2 & 2 & 0 & -3 & 1 \\ -1 & -2 & 0 & 1 & 2 & 0 & -2 & 1 \\ -1 & -2 & 0 & 1 & 1 & 1 & -2 & 1 \\ -1 & -2 & 0 & 1 & 1 & 0 & -1 & 1 \\ 0 & -1 & 0 & 0 & 1 & 0 & -1 & 1 \end{pmatrix}, \\
\begin{pmatrix} 0 & 1 & 0 & -1 & 0 & 0 & 1 & -1 \\ 1 & 1 & 0 & -1 & -1 & 0 & 2 & -1 \\ 1 & 2 & -1 & -1 & -1 & 0 & 2 & -1 \\ 1 & 3 & 0 & -2 & -2 & 0 & 3 & -1 \\ 1 & 2 & 0 & -1 & -2 & 0 & 2 & -1 \\ 1 & 2 & 0 & -1 & -1 & -1 & 2 & -1 \\ 1 & 2 & 0 & -1 & -1 & 0 & 1 & -1 \\ 0 & 1 & 0 & 0 & -1 & 0 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 1 & -2 & 0 & 1 & 0 & 0 \\ 0 & 2 & 1 & -2 & -1 & 1 & 1 & -1 \\ 0 & 3 & 1 & -3 & -1 & 2 & 0 & 0 \\ 0 & 4 & 2 & -4 & -2 & 2 & 1 & 0 \\ 0 & 3 & 2 & -3 & -2 & 2 & 0 & 0 \\ 0 & 3 & 2 & -3 & -1 & 1 & 0 & 0 \\ 1 & 2 & 1 & -2 & -1 & 1 & 0 & 0 \\ 0 & 1 & 1 & -1 & -1 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 0 & -1 & 0 & 0 & 1 & 0 \\ 1 & 1 & 1 & -2 & -1 & 1 & 1 & 0 \\ 2 & 1 & 0 & -2 & -1 & 1 & 1 & 1 \\ 2 & 2 & 1 & -3 & -2 & 1 & 2 & 1 \\ 2 & 1 & 1 & -2 & -2 & 1 & 1 & 1 \\ 2 & 1 & 1 & -2 & -1 & 0 & 1 & 1 \\ 2 & 1 & 0 & -1 & -1 & 0 & 1 & 0 \\ 1 & 0 & 0 & 0 & -1 & 0 & 1 & 0 \end{pmatrix}, \\
\begin{pmatrix} -1 & -1 & 1 & 1 & -1 & -1 & 2 & -1 \\ -1 & -1 & 2 & 0 & -1 & -1 & 3 & -1 \\ -1 & -2 & 2 & 1 & -1 & -2 & 4 & -2 \\ -2 & -2 & 4 & 0 & -1 & -3 & 6 & -3 \\ -1 & -1 & 3 & 0 & -1 & -3 & 5 & -2 \\ -1 & -1 & 2 & 0 & 0 & -3 & 4 & -1 \\ -1 & 0 & 1 & 0 & 0 & -2 & 3 & -1 \\ 0 & 0 & 0 & 0 & 0 & -1 & 2 & -1 \end{pmatrix}, \begin{pmatrix} -2 & 0 & 2 & 0 & -1 & 0 & 1 & -1 \\ -2 & 0 & 2 & 0 & -1 & -1 & 3 & -2 \\ -3 & 0 & 3 & 0 & -1 & -1 & 3 & -3 \\ -4 & 0 & 5 & -1 & -1 & -2 & 5 & -4 \\ -3 & 1 & 4 & -1 & -1 & -2 & 4 & -3 \\ -3 & 1 & 3 & -1 & 0 & -2 & 3 & -2 \\ -2 & 1 & 2 & -1 & 0 & -1 & 2 & -1 \\ -1 & 1 & 1 & -1 & 0 & 0 & 1 & -1 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 2 & 0 & -1 & 0 & 1 & 0 \\ -2 & 0 & 3 & -1 & -1 & 0 & 2 & -1 \\ -2 & -1 & 4 & -1 & -1 & 0 & 2 & -1 \\ -3 & -1 & 6 & -2 & -1 & -1 & 4 & -2 \\ -2 & 0 & 5 & -2 & -1 & -1 & 3 & -1 \\ -2 & 0 & 4 & -2 & 0 & -1 & 2 & 0 \\ -1 & 0 & 2 & -1 & 0 & -1 & 2 & 0 \\ 0 & 0 & 1 & -1 & 0 & 0 & 1 & 0 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} -1 & -1 & 1 & 0 & 0 & 1 & 0 & -1 \\ -2 & -1 & 1 & 1 & -1 & 1 & 1 & -2 \\ -3 & -1 & 2 & 0 & 0 & 1 & 1 & -2 \\ -4 & -2 & 2 & 1 & -1 & 2 & 2 & -3 \\ -3 & -1 & 1 & 1 & -1 & 2 & 1 & -2 \\ -2 & 0 & 1 & 0 & -1 & 2 & 1 & -2 \\ -1 & 0 & 1 & 0 & -1 & 1 & 1 & -1 \\ -1 & 0 & 1 & 0 & -1 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -2 & 0 & 1 & 0 & 0 & 1 & -1 \\ -1 & -2 & 1 & 1 & -1 & 1 & 1 & -1 \\ -1 & -3 & 1 & 1 & 0 & 0 & 2 & -1 \\ -2 & -4 & 1 & 2 & -1 & 1 & 3 & -2 \\ -1 & -3 & 0 & 2 & -1 & 1 & 2 & -1 \\ 0 & -2 & 0 & 1 & -1 & 1 & 2 & -1 \\ 0 & -1 & 0 & 1 & -1 & 0 & 2 & -1 \\ 0 & -1 & 0 & 1 & -1 & 0 & 1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 0 & 1 & 0 & 0 & 1 & -2 \\ -1 & -2 & 0 & 2 & -1 & 0 & 2 & -2 \\ -2 & -2 & 0 & 2 & 0 & -1 & 3 & -3 \\ -3 & -3 & 0 & 3 & -1 & 0 & 4 & -4 \\ -2 & -2 & -1 & 3 & -1 & 0 & 3 & -3 \\ -1 & -1 & -1 & 2 & -1 & 0 & 3 & -3 \\ -1 & 0 & 0 & 1 & -1 & 0 & 2 & -2 \\ -1 & 0 & 0 & 1 & -1 & 0 & 1 & -1 \end{pmatrix}, \\
\begin{pmatrix} 1 & 1 & 0 & -1 & 0 & 0 & -1 & 2 \\ 1 & 2 & 0 & -2 & 1 & 0 & -2 & 2 \\ 2 & 2 & 0 & -2 & 0 & 1 & -3 & 3 \\ 3 & 3 & 0 & -3 & 1 & 0 & -4 & 4 \\ 2 & 2 & 1 & -3 & 1 & 0 & -3 & 3 \\ 1 & 1 & 1 & -2 & 1 & 0 & -3 & 3 \\ 1 & 0 & 0 & -1 & 1 & 0 & -2 & 2 \\ 1 & 0 & 0 & -1 & 1 & 0 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 1 & 1 & -1 & 0 & 0 & -1 & 0 & 1 \\ 2 & 1 & -1 & -1 & 1 & -1 & -1 & 2 \\ 3 & 1 & -2 & 0 & 0 & -1 & -1 & 2 \\ 4 & 2 & -2 & -1 & 1 & -2 & -2 & 3 \\ 3 & 1 & -1 & -1 & 1 & -2 & -1 & 2 \\ 2 & 0 & -1 & 0 & 1 & -2 & -1 & 2 \\ 1 & 0 & -1 & 0 & 1 & -1 & -1 & 1 \\ 1 & 0 & -1 & 0 & 1 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 2 & 0 & -1 & 0 & 0 & -1 & 1 \\ 1 & 2 & -1 & -1 & 1 & -1 & -1 & 1 \\ 1 & 3 & -1 & -1 & 0 & 0 & -2 & 1 \\ 2 & 4 & -1 & -2 & 1 & -1 & -3 & 2 \\ 1 & 3 & 0 & -2 & 1 & -1 & -2 & 1 \\ 0 & 2 & 0 & -1 & 1 & -1 & -2 & 1 \\ 0 & 1 & 0 & -1 & 1 & 0 & -2 & 1 \\ 0 & 1 & 0 & -1 & 1 & 0 & -1 & 0 \end{pmatrix}, \\
\begin{pmatrix} -1 & 0 & 2 & 0 & -1 & 0 & 0 & 0 \\ -2 & 0 & 2 & 1 & -1 & -1 & 0 & 0 \\ -3 & 0 & 4 & 0 & -1 & -1 & 0 & 0 \\ -4 & -1 & 5 & 1 & -1 & -2 & 0 & 0 \\ -3 & 0 & 4 & 0 & 0 & -2 & 0 & 0 \\ -3 & 0 & 3 & 0 & 0 & -1 & 0 & 0 \\ -2 & 0 & 2 & 0 & 0 & -1 & 0 & 1 \\ -1 & 0 & 1 & 0 & 0 & 0 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 1 & 1 & -1 & -1 & 1 & 0 \\ -1 & -1 & 2 & 1 & -1 & -1 & 0 & 1 \\ -1 & -2 & 3 & 1 & -1 & -2 & 1 & 1 \\ -2 & -3 & 4 & 2 & -1 & -3 & 1 & 1 \\ -1 & -2 & 3 & 1 & 0 & -3 & 1 & 1 \\ -1 & -2 & 2 & 1 & 0 & -2 & 1 & 1 \\ -1 & -1 & 1 & 1 & 0 & -2 & 1 & 1 \\ 0 & -1 & 0 & 1 & 0 & -1 & 0 & 1 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 1 & 1 & -1 & -1 & 1 & -1 \\ -1 & -1 & 1 & 2 & -1 & -2 & 1 & 0 \\ -2 & -1 & 2 & 2 & -1 & -3 & 2 & -1 \\ -3 & -2 & 3 & 3 & -1 & -4 & 2 & -1 \\ -2 & -1 & 2 & 2 & 0 & -4 & 2 & -1 \\ -2 & -1 & 1 & 2 & 0 & -3 & 2 & -1 \\ -2 & 0 & 1 & 1 & 0 & -2 & 1 & 0 \\ -1 & 0 & 0 & 1 & 0 & -1 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 1 & 0 & -1 & -1 & 1 & 1 & -1 & 1 \\ 1 & 1 & -1 & -2 & 1 & 2 & -1 & 0 \\ 2 & 1 & -2 & -2 & 1 & 3 & -2 & 1 \\ 3 & 2 & -3 & -3 & 1 & 4 & -2 & 1 \\ 2 & 1 & -2 & -2 & 0 & 4 & -2 & 1 \\ 2 & 1 & -1 & -2 & 0 & 3 & -2 & 1 \\ 2 & 0 & -1 & -1 & 0 & 2 & -1 & 0 \\ 1 & 0 & 0 & -1 & 0 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & -2 & 0 & 1 & 0 & 0 & 0 \\ 2 & 0 & -2 & -1 & 1 & 1 & 0 & 0 \\ 3 & 0 & -4 & 0 & 1 & 1 & 0 & 0 \\ 4 & 1 & -5 & -1 & 1 & 2 & 0 & 0 \\ 3 & 0 & -4 & 0 & 0 & 2 & 0 & 0 \\ 3 & 0 & -3 & 0 & 0 & 1 & 0 & 0 \\ 2 & 0 & -2 & 0 & 0 & 1 & 0 & -1 \\ 1 & 0 & -1 & 0 & 0 & 0 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 1 & -1 & -1 & 1 & 1 & -1 & 0 \\ 1 & 1 & -2 & -1 & 1 & 1 & 0 & -1 \\ 1 & 2 & -3 & -1 & 1 & 2 & -1 & -1 \\ 2 & 3 & -4 & -2 & 1 & 3 & -1 & -1 \\ 1 & 2 & -3 & -1 & 0 & 3 & -1 & -1 \\ 1 & 2 & -2 & -1 & 0 & 2 & -1 & -1 \\ 1 & 1 & -1 & -1 & 0 & 2 & -1 & -1 \\ 0 & 1 & 0 & -1 & 0 & 1 & 0 & -1 \end{pmatrix}, \\
\begin{pmatrix} 1 & -1 & -2 & 2 & -1 & 1 & 0 & -1 \\ 2 & -1 & -2 & 2 & -2 & 2 & 0 & -1 \\ 2 & -2 & -3 & 3 & -2 & 2 & 1 & -2 \\ 3 & -2 & -4 & 4 & -4 & 4 & 1 & -3 \\ 3 & -1 & -4 & 3 & -3 & 3 & 1 & -2 \\ 3 & -1 & -3 & 2 & -2 & 2 & 1 & -2 \\ 2 & 0 & -2 & 1 & -1 & 1 & 1 & -2 \\ 1 & 0 & -1 & 1 & -1 & 0 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & -1 & 1 & -1 & 2 & -1 & -1 \\ 1 & 0 & -2 & 2 & -2 & 2 & 0 & -2 \\ 0 & 0 & -2 & 2 & -2 & 3 & 0 & -3 \\ 1 & 0 & -3 & 3 & -4 & 5 & 0 & -4 \\ 1 & 1 & -3 & 2 & -3 & 4 & 0 & -3 \\ 1 & 1 & -2 & 1 & -2 & 3 & 0 & -3 \\ 1 & 1 & -1 & 0 & -1 & 2 & 0 & -2 \\ 0 & 1 & 0 & 0 & -1 & 1 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 1 & -1 & -1 & 1 & -1 & 2 & -1 & 0 \\ 1 & 0 & -1 & 1 & -2 & 3 & -1 & -1 \\ 1 & -1 & -1 & 1 & -2 & 4 & -1 & -1 \\ 2 & -1 & -2 & 2 & -4 & 6 & -1 & -2 \\ 2 & 0 & -2 & 1 & -3 & 5 & -1 & -1 \\ 2 & 0 & -1 & 0 & -2 & 4 & -1 & -1 \\ 2 & 0 & -1 & 0 & -1 & 2 & 0 & -1 \\ 1 & 0 & 0 & 0 & -1 & 1 & 0 & 0 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} -1 & 1 & 1 & -1 & 1 & -2 & 1 & 0 \\ -1 & 0 & 1 & -1 & 2 & -3 & 1 & 1 \\ -1 & 1 & 1 & -1 & 2 & -4 & 1 & 1 \\ -2 & 1 & 2 & -2 & 4 & -6 & 1 & 2 \\ -2 & 0 & 2 & -1 & 3 & -5 & 1 & 1 \\ -2 & 0 & 1 & 0 & 2 & -4 & 1 & 1 \\ -2 & 0 & 1 & 0 & 1 & -2 & 0 & 1 \\ -1 & 0 & 0 & 0 & 1 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 1 & 2 & -2 & 1 & -1 & 0 & 1 \\ -2 & 1 & 2 & -2 & 2 & -2 & 0 & 1 \\ -2 & 2 & 3 & -3 & 2 & -2 & -1 & 2 \\ -3 & 2 & 4 & -4 & 4 & -4 & -1 & 3 \\ -3 & 1 & 4 & -3 & 3 & -3 & -1 & 2 \\ -3 & 1 & 3 & -2 & 2 & -2 & -1 & 2 \\ -2 & 0 & 2 & -1 & 1 & -1 & -1 & 2 \\ -1 & 0 & 1 & -1 & 1 & 0 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 1 & -1 & 1 & -2 & 1 & 1 \\ -1 & 0 & 2 & -2 & 2 & -2 & 0 & 2 \\ 0 & 0 & 2 & -2 & 2 & -3 & 0 & 3 \\ -1 & 0 & 3 & -3 & 4 & -5 & 0 & 4 \\ -1 & -1 & 3 & -2 & 3 & -4 & 0 & 3 \\ -1 & -1 & 2 & -1 & 2 & -3 & 0 & 3 \\ -1 & -1 & 1 & 0 & 1 & -2 & 0 & 2 \\ 0 & -1 & 0 & 0 & 1 & -1 & 0 & 1 \end{pmatrix}, \\
\begin{pmatrix} -1 & 0 & 0 & -1 & 2 & 0 & -1 & 0 \\ -1 & -1 & 0 & -1 & 3 & -1 & 0 & -1 \\ -2 & 0 & 0 & -2 & 4 & -1 & 0 & -1 \\ -3 & -1 & 1 & -3 & 6 & -2 & 0 & -1 \\ -3 & -1 & 1 & -2 & 5 & -2 & 0 & -1 \\ -2 & 0 & 1 & -2 & 4 & -2 & 0 & -1 \\ -1 & 0 & 1 & -2 & 3 & -1 & 0 & -1 \\ -1 & 0 & 1 & -1 & 1 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 0 & -1 & 2 & 0 & -1 & 1 \\ -1 & -1 & 1 & -2 & 3 & 0 & -1 & 0 \\ -1 & -1 & 1 & -3 & 4 & 0 & -1 & 1 \\ -2 & -2 & 2 & -4 & 6 & -1 & -1 & 1 \\ -2 & -2 & 2 & -3 & 5 & -1 & -1 & 1 \\ -1 & -1 & 2 & -3 & 4 & -1 & -1 & 1 \\ 0 & -1 & 1 & -2 & 3 & -1 & 0 & 0 \\ 0 & -1 & 1 & -1 & 1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -1 & -1 & 0 & 2 & -1 & 0 & 0 \\ 0 & -2 & 0 & -1 & 3 & -1 & 0 & 0 \\ 0 & -2 & -1 & -1 & 4 & -2 & 1 & 0 \\ -1 & -3 & 0 & -2 & 6 & -3 & 1 & 0 \\ -1 & -3 & 0 & -1 & 5 & -3 & 1 & 0 \\ 0 & -2 & 0 & -1 & 4 & -3 & 1 & 0 \\ 0 & -1 & 0 & -1 & 3 & -2 & 1 & -1 \\ 0 & -1 & 0 & 0 & 1 & -1 & 1 & -1 \end{pmatrix}, \\
\begin{pmatrix} 0 & 1 & 1 & 0 & -2 & 1 & 0 & 0 \\ 0 & 2 & 0 & 1 & -3 & 1 & 0 & 0 \\ 0 & 2 & 1 & 1 & -4 & 2 & -1 & 0 \\ 1 & 3 & 0 & 2 & -6 & 3 & -1 & 0 \\ 1 & 3 & 0 & 1 & -5 & 3 & -1 & 0 \\ 0 & 2 & 0 & 1 & -4 & 3 & -1 & 0 \\ 0 & 1 & 0 & 1 & -3 & 2 & -1 & 1 \\ 0 & 1 & 0 & 0 & -1 & 1 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 0 & 1 & -2 & 0 & 1 & 0 \\ 1 & 1 & 0 & 1 & -3 & 1 & 0 & 1 \\ 2 & 0 & 0 & 2 & -4 & 1 & 0 & 1 \\ 3 & 1 & -1 & 3 & -6 & 2 & 0 & 1 \\ 3 & 1 & -1 & 2 & -5 & 2 & 0 & 1 \\ 2 & 0 & -1 & 2 & -4 & 2 & 0 & 1 \\ 1 & 0 & -1 & 2 & -3 & 1 & 0 & 1 \\ 1 & 0 & -1 & 1 & -1 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 0 & 1 & -2 & 0 & 1 & -1 \\ 1 & 1 & -1 & 2 & -3 & 0 & 1 & 0 \\ 1 & 1 & -1 & 3 & -4 & 0 & 1 & -1 \\ 2 & 2 & -2 & 4 & -6 & 1 & 1 & -1 \\ 2 & 2 & -2 & 3 & -5 & 1 & 1 & -1 \\ 1 & 1 & -2 & 3 & -4 & 1 & 1 & -1 \\ 0 & 1 & -1 & 2 & -3 & 1 & 0 & 0 \\ 0 & 1 & -1 & 1 & -1 & 0 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 0 & -1 & 1 & 1 & -1 & 0 & -1 & 1 \\ -1 & -1 & 2 & 1 & -1 & 0 & -2 & 1 \\ -1 & -2 & 3 & 1 & -1 & 0 & -2 & 1 \\ -2 & -3 & 4 & 2 & -1 & -1 & -3 & 2 \\ -1 & -2 & 3 & 1 & 0 & -1 & -3 & 2 \\ -1 & -2 & 2 & 1 & 0 & 0 & -3 & 2 \\ 0 & -2 & 1 & 1 & 0 & 0 & -2 & 1 \\ 0 & -1 & 1 & 0 & 0 & 0 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 0 & 2 & -1 & -1 & 0 & 0 \\ 0 & -2 & 1 & 2 & -1 & -1 & -1 & 1 \\ 0 & -3 & 1 & 3 & -1 & -2 & 0 & 0 \\ -1 & -4 & 2 & 4 & -1 & -3 & -1 & 1 \\ 0 & -3 & 1 & 3 & 0 & -3 & -1 & 1 \\ 0 & -3 & 0 & 3 & 0 & -2 & -1 & 1 \\ 0 & -2 & 0 & 2 & 0 & -1 & -1 & 0 \\ 0 & -1 & 0 & 1 & 0 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 1 & 1 & -1 & 0 & -1 & 0 \\ -1 & -1 & 1 & 2 & -1 & -1 & -1 & 0 \\ -2 & -1 & 2 & 2 & -1 & -1 & -1 & -1 \\ -3 & -2 & 3 & 3 & -1 & -2 & -2 & 0 \\ -2 & -1 & 2 & 2 & 0 & -2 & -2 & 0 \\ -2 & -1 & 1 & 2 & 0 & -1 & -2 & 0 \\ -1 & -1 & 1 & 1 & 0 & 0 & -2 & 0 \\ -1 & 0 & 1 & 0 & 0 & 0 & -1 & 0 \end{pmatrix}, \\
\begin{pmatrix} 1 & 0 & -1 & -1 & 1 & 0 & 1 & 0 \\ 1 & 1 & -1 & -2 & 1 & 1 & 1 & 0 \\ 2 & 1 & -2 & -2 & 1 & 1 & 1 & 1 \\ 3 & 2 & -3 & -3 & 1 & 2 & 2 & 0 \\ 2 & 1 & -2 & -2 & 0 & 2 & 2 & 0 \\ 2 & 1 & -1 & -2 & 0 & 1 & 2 & 0 \\ 1 & 1 & -1 & -1 & 0 & 0 & 2 & 0 \\ 1 & 0 & -1 & 0 & 0 & 0 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 1 & -1 & -1 & 1 & 0 & 1 & -1 \\ 1 & 1 & -2 & -1 & 1 & 0 & 2 & -1 \\ 1 & 2 & -3 & -1 & 1 & 0 & 2 & -1 \\ 2 & 3 & -4 & -2 & 1 & 1 & 3 & -2 \\ 1 & 2 & -3 & -1 & 0 & 1 & 3 & -2 \\ 1 & 2 & -2 & -1 & 0 & 0 & 3 & -2 \\ 0 & 2 & -1 & -1 & 0 & 0 & 2 & -1 \\ 0 & 1 & -1 & 0 & 0 & 0 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 0 & -2 & 1 & 1 & 0 & 0 \\ 0 & 2 & -1 & -2 & 1 & 1 & 1 & -1 \\ 0 & 3 & -1 & -3 & 1 & 2 & 0 & 0 \\ 1 & 4 & -2 & -4 & 1 & 3 & 1 & -1 \\ 0 & 3 & -1 & -3 & 0 & 3 & 1 & -1 \\ 0 & 3 & 0 & -3 & 0 & 2 & 1 & -1 \\ 0 & 2 & 0 & -2 & 0 & 1 & 1 & 0 \\ 0 & 1 & 0 & -1 & 0 & 1 & 0 & 0 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} -1 & 0 & 0 & -1 & 2 & 0 & -1 & 0 \\ -1 & 0 & -1 & -1 & 3 & -1 & 0 & 0 \\ -2 & 0 & 0 & -2 & 4 & -1 & 0 & -1 \\ -3 & 0 & 0 & -3 & 6 & -2 & 0 & 0 \\ -3 & 0 & 0 & -2 & 5 & -2 & 0 & 0 \\ -2 & 1 & 0 & -2 & 4 & -2 & 0 & 0 \\ -1 & 1 & 0 & -2 & 3 & -1 & 0 & 0 \\ -1 & 1 & 0 & -1 & 1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 0 & -1 & 2 & 0 & -1 & 1 \\ -1 & 0 & 0 & -2 & 3 & 0 & -1 & 1 \\ -1 & -1 & 1 & -3 & 4 & 0 & -1 & 1 \\ -2 & -1 & 1 & -4 & 6 & -1 & -1 & 2 \\ -2 & -1 & 1 & -3 & 5 & -1 & -1 & 2 \\ -1 & 0 & 1 & -3 & 4 & -1 & -1 & 2 \\ 0 & 0 & 0 & -2 & 3 & -1 & 0 & 1 \\ 0 & 0 & 0 & -1 & 1 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & -1 & -1 & 0 & 2 & -1 & 0 & 0 \\ 0 & -1 & -1 & -1 & 3 & -1 & 0 & 1 \\ 0 & -2 & -1 & -1 & 4 & -2 & 1 & 0 \\ -1 & -2 & -1 & -2 & 6 & -3 & 1 & 1 \\ -1 & -2 & -1 & -1 & 5 & -3 & 1 & 1 \\ 0 & -1 & -1 & -1 & 4 & -3 & 1 & 1 \\ 0 & 0 & -1 & -1 & 3 & -2 & 1 & 0 \\ 0 & 0 & -1 & 0 & 1 & -1 & 1 & 0 \end{pmatrix}, \\
\begin{pmatrix} 0 & 1 & 1 & 0 & -2 & 1 & 0 & 0 \\ 0 & 1 & 1 & 1 & -3 & 1 & 0 & -1 \\ 0 & 2 & 1 & 1 & -4 & 2 & -1 & 0 \\ 1 & 2 & 1 & 2 & -6 & 3 & -1 & -1 \\ 1 & 2 & 1 & 1 & -5 & 3 & -1 & -1 \\ 0 & 1 & 1 & 1 & -4 & 3 & -1 & -1 \\ 0 & 0 & 1 & 1 & -3 & 2 & -1 & 0 \\ 0 & 0 & 1 & 0 & -1 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 0 & 1 & -2 & 0 & 1 & 0 \\ 1 & 0 & 1 & 1 & -3 & 1 & 0 & 0 \\ 2 & 0 & 0 & 2 & -4 & 1 & 0 & 1 \\ 3 & 0 & 0 & 3 & -6 & 2 & 0 & 0 \\ 3 & 0 & 0 & 2 & -5 & 2 & 0 & 0 \\ 2 & -1 & 0 & 2 & -4 & 2 & 0 & 0 \\ 1 & -1 & 0 & 2 & -3 & 1 & 0 & 0 \\ 1 & -1 & 0 & 1 & -1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 0 & 1 & -2 & 0 & 1 & -1 \\ 1 & 0 & 0 & 2 & -3 & 0 & 1 & -1 \\ 1 & 1 & -1 & 3 & -4 & 0 & 1 & -1 \\ 2 & 1 & -1 & 4 & -6 & 1 & 1 & -2 \\ 2 & 1 & -1 & 3 & -5 & 1 & 1 & -2 \\ 1 & 0 & -1 & 3 & -4 & 1 & 1 & -2 \\ 0 & 0 & 0 & 2 & -3 & 1 & 0 & -1 \\ 0 & 0 & 0 & 1 & -1 & 0 & 0 & -1 \end{pmatrix}, \\
\begin{pmatrix} 1 & 0 & -1 & 2 & -2 & 0 & 0 & 0 \\ 2 & 0 & -1 & 2 & -2 & 0 & -1 & 1 \\ 3 & 0 & -2 & 3 & -3 & 0 & -1 & 1 \\ 4 & 0 & -2 & 4 & -4 & 0 & -2 & 1 \\ 3 & 0 & -1 & 3 & -3 & -1 & -1 & 1 \\ 2 & -1 & -1 & 3 & -2 & -1 & -1 & 1 \\ 1 & 0 & -1 & 2 & -1 & -1 & -1 & 1 \\ 1 & 0 & -1 & 1 & 0 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 0 & 1 & -2 & 1 & -1 & 0 \\ 1 & 1 & -1 & 2 & -2 & 0 & -1 & 0 \\ 1 & 2 & -1 & 2 & -3 & 1 & -2 & 0 \\ 2 & 2 & -1 & 3 & -4 & 1 & -3 & 0 \\ 1 & 2 & 0 & 2 & -3 & 0 & -2 & 0 \\ 0 & 1 & 0 & 2 & -2 & 0 & -2 & 0 \\ 0 & 1 & 0 & 1 & -1 & 0 & -2 & 1 \\ 0 & 1 & 0 & 0 & 0 & 0 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 0 & 1 & -2 & 1 & -1 & 1 \\ 1 & 1 & 0 & 1 & -2 & 1 & -2 & 1 \\ 2 & 1 & 0 & 1 & -3 & 2 & -3 & 2 \\ 3 & 1 & 0 & 2 & -4 & 2 & -4 & 2 \\ 2 & 1 & 1 & 1 & -3 & 1 & -3 & 2 \\ 1 & 0 & 1 & 1 & -2 & 1 & -3 & 2 \\ 1 & 0 & 0 & 1 & -1 & 0 & -2 & 2 \\ 1 & 0 & 0 & 0 & 0 & 0 & -1 & 1 \end{pmatrix}, \\
\begin{pmatrix} -1 & 0 & 0 & -1 & 2 & -1 & 1 & -1 \\ -1 & -1 & 0 & -1 & 2 & -1 & 2 & -1 \\ -2 & -1 & 0 & -1 & 3 & -2 & 3 & -2 \\ -3 & -1 & 0 & -2 & 4 & -2 & 4 & -2 \\ -2 & -1 & -1 & -1 & 3 & -1 & 3 & -2 \\ -1 & 0 & -1 & -1 & 2 & -1 & 3 & -2 \\ -1 & 0 & 0 & -1 & 1 & 0 & 2 & -2 \\ -1 & 0 & 0 & 0 & 0 & 0 & 1 & -1 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 1 & -2 & 2 & 0 & 0 & 0 \\ -2 & 0 & 1 & -2 & 2 & 0 & 1 & -1 \\ -3 & 0 & 2 & -3 & 3 & 0 & 1 & -1 \\ -4 & 0 & 2 & -4 & 4 & 0 & 2 & -1 \\ -3 & 0 & 1 & -3 & 3 & 1 & 1 & -1 \\ -2 & 1 & 1 & -3 & 2 & 1 & 1 & -1 \\ -1 & 0 & 1 & -2 & 1 & 1 & 1 & -1 \\ -1 & 0 & 1 & -1 & 0 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 0 & -1 & 2 & -1 & 1 & 0 \\ -1 & -1 & 1 & -2 & 2 & 0 & 1 & 0 \\ -1 & -2 & 1 & -2 & 3 & -1 & 2 & 0 \\ -2 & -2 & 1 & -3 & 4 & -1 & 3 & 0 \\ -1 & -2 & 0 & -2 & 3 & 0 & 2 & 0 \\ 0 & -1 & 0 & -2 & 2 & 0 & 2 & 0 \\ 0 & -1 & 0 & -1 & 1 & 0 & 2 & -1 \\ 0 & -1 & 0 & 0 & 0 & 0 & 1 & 0 \end{pmatrix}, \\
\begin{pmatrix} 1 & -1 & 1 & 0 & -1 & 0 & 1 & -1 \\ 1 & -1 & 2 & -1 & -1 & 1 & 0 & -1 \\ 2 & -2 & 2 & 0 & -2 & 1 & 0 & -1 \\ 3 & -2 & 3 & -1 & -2 & 1 & 0 & -2 \\ 3 & -1 & 2 & -1 & -2 & 1 & 0 & -1 \\ 2 & -1 & 2 & -1 & -1 & 0 & 0 & 0 \\ 1 & -1 & 1 & 0 & -1 & 0 & 0 & 0 \\ 1 & -1 & 0 & 0 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 1 & 0 & -1 & 0 & 1 & -2 \\ 1 & -1 & 1 & 0 & -1 & 0 & 1 & -2 \\ 1 & -1 & 1 & 1 & -2 & 0 & 1 & -3 \\ 2 & -1 & 2 & 0 & -2 & 0 & 1 & -4 \\ 2 & 0 & 1 & 0 & -2 & 0 & 1 & -3 \\ 1 & 0 & 1 & 0 & -1 & -1 & 1 & -2 \\ 0 & 0 & 1 & 0 & -1 & 0 & 0 & -1 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 2 & -1 & -1 & 1 & 0 & -1 \\ 0 & 0 & 2 & -1 & -1 & 1 & 0 & -2 \\ 0 & 0 & 3 & -1 & -2 & 2 & -1 & -2 \\ 1 & 0 & 4 & -2 & -2 & 2 & -1 & -3 \\ 1 & 1 & 3 & -2 & -2 & 2 & -1 & -2 \\ 0 & 1 & 3 & -2 & -1 & 1 & -1 & -1 \\ 0 & 0 & 2 & -1 & -1 & 1 & -1 & 0 \\ 0 & 0 & 1 & -1 & 0 & 1 & -1 & 0 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} 0 & 0 & -2 & 1 & 1 & -1 & 0 & 1 \\ 0 & 0 & -2 & 1 & 1 & -1 & 0 & 2 \\ 0 & 0 & -3 & 1 & 2 & -2 & 1 & 2 \\ -1 & 0 & -4 & 2 & 2 & -2 & 1 & 3 \\ -1 & -1 & -3 & 2 & 2 & -2 & 1 & 2 \\ 0 & -1 & -3 & 2 & 1 & -1 & 1 & 1 \\ 0 & 0 & -2 & 1 & 1 & -1 & 1 & 0 \\ 0 & 0 & -1 & 1 & 0 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 1 & -1 & 0 & 1 & 0 & -1 & 1 \\ -1 & 1 & -2 & 1 & 1 & -1 & 0 & 1 \\ -2 & 2 & -2 & 0 & 2 & -1 & 0 & 1 \\ -3 & 2 & -3 & 1 & 2 & -1 & 0 & 2 \\ -3 & 1 & -2 & 1 & 2 & -1 & 0 & 1 \\ -2 & 1 & -2 & 1 & 1 & 0 & 0 & 0 \\ -1 & 1 & -1 & 0 & 1 & 0 & 0 & 0 \\ -1 & 1 & 0 & 0 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 & -1 & 0 & 1 & 0 & -1 & 2 \\ -1 & 1 & -1 & 0 & 1 & 0 & -1 & 2 \\ -1 & 1 & -1 & -1 & 2 & 0 & -1 & 3 \\ -2 & 1 & -2 & 0 & 2 & 0 & -1 & 4 \\ -2 & 0 & -1 & 0 & 2 & 0 & -1 & 3 \\ -1 & 0 & -1 & 0 & 1 & 1 & -1 & 2 \\ 0 & 0 & -1 & 0 & 1 & 0 & 0 & 1 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \\
\begin{pmatrix} 2 & 0 & -1 & 0 & 0 & 0 & 1 & -1 \\ 2 & 0 & 0 & -1 & 0 & 1 & 1 & -2 \\ 3 & 0 & 0 & -1 & 0 & 0 & 2 & -2 \\ 4 & 0 & 0 & -1 & -1 & 1 & 3 & -4 \\ 3 & -1 & 0 & 0 & -1 & 1 & 2 & -3 \\ 3 & -1 & 0 & 0 & -1 & 1 & 1 & -2 \\ 2 & -1 & 0 & 0 & 0 & 0 & 1 & -2 \\ 1 & -1 & 0 & 0 & 0 & 0 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 1 & 1 & -1 & 0 & 0 & 0 & 1 & -2 \\ 2 & 0 & -1 & 0 & 0 & 0 & 2 & -3 \\ 2 & 1 & -1 & 0 & 0 & -1 & 3 & -4 \\ 3 & 1 & -1 & 0 & -1 & 0 & 4 & -6 \\ 2 & 0 & -1 & 1 & -1 & 0 & 3 & -5 \\ 2 & 0 & -1 & 1 & -1 & 0 & 2 & -4 \\ 1 & 0 & 0 & 0 & 0 & 0 & 1 & -3 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & -2 \end{pmatrix}, \begin{pmatrix} 1 & 1 & 0 & -1 & 0 & 1 & 0 & -1 \\ 1 & 1 & 0 & -1 & 0 & 1 & 1 & -3 \\ 1 & 2 & 1 & -2 & 0 & 1 & 1 & -3 \\ 2 & 2 & 1 & -2 & -1 & 2 & 2 & -5 \\ 1 & 1 & 1 & -1 & -1 & 2 & 1 & -4 \\ 1 & 1 & 1 & -1 & -1 & 2 & 0 & -3 \\ 1 & 0 & 1 & -1 & 0 & 1 & 0 & -2 \\ 0 & 0 & 1 & -1 & 0 & 1 & 0 & -1 \end{pmatrix}, \\
\begin{pmatrix} -1 & -1 & 0 & 1 & 0 & -1 & 0 & 1 \\ -1 & -1 & 0 & 1 & 0 & -1 & -1 & 3 \\ -1 & -2 & -1 & 2 & 0 & -1 & -1 & 3 \\ -2 & -2 & -1 & 2 & 1 & -2 & -2 & 5 \\ -1 & -1 & -1 & 1 & 1 & -2 & -1 & 4 \\ -1 & -1 & -1 & 1 & 1 & -2 & 0 & 3 \\ -1 & 0 & -1 & 1 & 0 & -1 & 0 & 2 \\ 0 & 0 & -1 & 1 & 0 & -1 & 0 & 1 \end{pmatrix}, \begin{pmatrix} -2 & 0 & 1 & 0 & 0 & 0 & -1 & 1 \\ -2 & 0 & 0 & 1 & 0 & -1 & -1 & 2 \\ -3 & 0 & 0 & 1 & 0 & 0 & -2 & 2 \\ -4 & 0 & 0 & 1 & 1 & -1 & -3 & 4 \\ -3 & 1 & 0 & 0 & 1 & -1 & -2 & 3 \\ -3 & 1 & 0 & 0 & 1 & -1 & -1 & 2 \\ -2 & 1 & 0 & 0 & 0 & 0 & -1 & 2 \\ -1 & 1 & 0 & 0 & 0 & 0 & -1 & 1 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 1 & 0 & 0 & 0 & -1 & 2 \\ -2 & 0 & 1 & 0 & 0 & 0 & -2 & 3 \\ -2 & -1 & 1 & 0 & 0 & 1 & -3 & 4 \\ -3 & -1 & 1 & 0 & 1 & 0 & -4 & 6 \\ -2 & 0 & 1 & -1 & 1 & 0 & -3 & 5 \\ -2 & 0 & 1 & -1 & 1 & 0 & -2 & 4 \\ -1 & 0 & 0 & 0 & 0 & 0 & -1 & 3 \\ 0 & 0 & 0 & 0 & 0 & 0 & -1 & 2 \end{pmatrix}.$$

The character table of $G^{s_{12}}$:

	10										20									
$\chi_{12}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{12}^{(2)}$	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	-1	-1	1	1	1	1	1	-1
$\chi_{12}^{(3)}$	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	-1	-1	1	1	1	1	1	-1
$\chi_{12}^{(4)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{12}^{(5)}$	1	A	/A	-/A	-1	-A	A	/A	1	-1	-A	-/A	-A	-/A	-1	1	A	/A	/A	1
$\chi_{12}^{(6)}$	1	/A	A	-A	-1	-/A	/A	A	1	-1	-/A	-A	-/A	-A	-1	1	/A	A	A	1
$\chi_{12}^{(7)}$	1	A	/A	-/A	-1	-A	A	/A	1	-1	-A	-/A	-A	-/A	-1	1	A	/A	/A	1
$\chi_{12}^{(8)}$	1	/A	A	-A	-1	-/A	/A	A	1	-1	-/A	-A	-/A	-A	-1	1	/A	A	A	1
$\chi_{12}^{(9)}$	1	A	/A	/A	1	A	A	/A	1	1	A	/A	A	/A	1	1	A	/A	/A	1
$\chi_{12}^{(10)}$	1	/A	A	A	1	/A	/A	A	1	1	/A	A	/A	A	1	1	/A	A	A	1
$\chi_{12}^{(11)}$	1	A	/A	/A	1	A	A	/A	1	1	A	/A	A	/A	1	1	A	/A	/A	1
$\chi_{12}^{(12)}$	1	/A	A	A	1	/A	/A	A	1	1	/A	A	/A	A	1	1	/A	A	A	1
$\chi_{12}^{(13)}$	6	6	6	6	6	6	.	.	.	.	.	.	-3	-3	-3	-3	-3	-3	-1	-1
$\chi_{12}^{(14)}$	6	6	6	6	6	6	.	.	.	.	.	.	-3	-3	-3	-3	-3	-3	-1	-1
$\chi_{12}^{(15)}$	6	6	6	-6	-6	-6	.	.	.	.	.	.	3	3	3	-3	-3	-3	-1	-1
$\chi_{12}^{(16)}$	6	6	6	-6	-6	-6	.	.	.	.	.	.	3	3	3	-3	-3	-3	-1	-1
$\chi_{12}^{(17)}$	6	B	/B	/B	6	B	.	.	.	.	.	.	M	/M	-3	-3	M	/M	-/A	-1
$\chi_{12}^{(18)}$	6	/B	B	B	6	/B	.	.	.	.	.	.	/M	M	-3	-3	/M	M	-A	-1
$\chi_{12}^{(19)}$	6	B	/B	/B	6	B	.	.	.	.	.	.	M	/M	-3	-3	M	/M	-/A	-1
$\chi_{12}^{(20)}$	6	/B	B	B	6	/B	.	.	.	.	.	.	/M	M	-3	-3	/M	M	-A	-1
$\chi_{12}^{(21)}$	6	B	/B	-/B	-6	-B	.	.	.	.	.	.	-M	-/M	3	-3	M	/M	-/A	-1
$\chi_{12}^{(22)}$	6	/B	B	-B	-6	-/B	.	.	.	.	.	.	-/M	-M	3	-3	/M	M	-A	-1
$\chi_{12}^{(23)}$	6	B	/B	-/B	-6	-B	.	.	.	.	.	.	-M	-/M	3	-3	M	/M	-/A	-1
$\chi_{12}^{(24)}$	6	/B	B	-B	-6	-/B	.	.	.	.	.	.	-/M	-M	3	-3	/M	M	-A	-1
$\chi_{12}^{(25)}$	10	10	10	10	10	10	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1
$\chi_{12}^{(26)}$	10	10	10	-10	-10	-10	1	1	1	-1	-1	-1	-1	-1	1	1	1	1	-1	-1
$\chi_{12}^{(27)}$	10	C	/C	/C	10	C	A	/A	1	1	A	/A	A	/A	1	1	A	/A	-/A	-1
$\chi_{12}^{(28)}$	10	/C	C	C	10	/C	/A	A	1	1	/A	A	/A	A	1	1	/A	A	-A	-1
$\chi_{12}^{(29)}$	10	C	/C	-/C	-10	-C	A	/A	1	-1	-A	-/A	-A	-/A	-1	1	A	/A	-/A	-1
$\chi_{12}^{(30)}$	10	/C	C	-C	-10	-/C	/A	A	1	-1	-/A	-A	-/A	-A	-1	1	/A	A	-A	-1
$\chi_{12}^{(31)}$	15	15	15	15	15	15	.	.	.	.	.	.	6	6	6	6	6	6	.	.
$\chi_{12}^{(32)}$	15	15	15	15	15	15	.	.	.	.	.	.	-3	-3	-3	-3	-3	-3	-1	-1
$\chi_{12}^{(33)}$	15	15	15	15	15	15	.	.	.	.	.	.	6	6	6	6	6	6	.	.
$\chi_{12}^{(34)}$	15	15	15	15	15	15	.	.	.	.	.	.	-3	-3	-3	-3	-3	-3	-1	-1
$\chi_{12}^{(35)}$	15	15	15	-15	-15	-15	.	.	.	.	.	.	-6	-6	-6	6	6	6	.	.
$\chi_{12}^{(36)}$	15	15	15	-15	-15	-15	.	.	.	.	.	.	3	3	3	-3	-3	-3	-1	-1
$\chi_{12}^{(37)}$	15	15	15	-15	-15	-15	.	.	.	.	.	.	-6	-6	-6	6	6	6	.	.
$\chi_{12}^{(38)}$	15	15	15	-15	-15	-15	.	.	.	.	.	.	3	3	3	-3	-3	-3	-1	-1
$\chi_{12}^{(39)}$	15	D	/D	/D	15	D	.	.	.	.	.	.	B	/B	6	6	B	/B	.	.
$\chi_{12}^{(40)}$	15	/D	D	D	15	/D	.	.	.	.	.	.	/B	B	6	6	/B	B	.	.
$\chi_{12}^{(41)}$	15	D	/D	/D	15	D	.	.	.	.	.	.	M	/M	-3	-3	M	/M	-/A	-1
$\chi_{12}^{(42)}$	15	/D	D	D	15	/D	.	.	.	.	.	.	/M	M	-3	-3	/M	M	-A	-1
$\chi_{12}^{(43)}$	15	D	/D	/D	15	D	.	.	.	.	.	.	B	/B	6	6	B	/B	.	.
$\chi_{12}^{(44)}$	15	/D	D	D	15	/D	.	.	.	.	.	.	/B	B	6	6	/B	B	.	.
$\chi_{12}^{(45)}$	15	D	/D	/D	15	D	.	.	.	.	.	.	M	/M	-3	-3	M	/M	-/A	-1

	10												20										
$\chi_{12}^{(46)}$	15	/D	D	D	15	/D	.	.	.	.	.	/M	M	-3	-3	/M	M	-A	-1	-/A	-/A	-A
$\chi_{12}^{(47)}$	15	D	/D	-/D	-15	-D	.	.	.	.	.	-B	-/B	-6	6	B	/B	.	.	.	.	.
$\chi_{12}^{(48)}$	15	/D	D	-D	-15	-/D	.	.	.	.	.	-/B	-B	-6	6	/B	B	.	.	.	.	.
$\chi_{12}^{(49)}$	15	D	/D	-/D	-15	-D	.	.	.	.	.	-M	-/M	3	-3	M	/M	-/A	-1	-A	A	/A
$\chi_{12}^{(50)}$	15	/D	D	-D	-15	-/D	.	.	.	.	.	-/M	-M	3	-3	/M	M	-A	-1	-/A	/A	A
$\chi_{12}^{(51)}$	15	D	/D	-/D	-15	-D	.	.	.	.	.	-B	-/B	-6	6	B	/B	.	.	.	.	.
$\chi_{12}^{(52)}$	15	/D	D	-D	-15	-/D	.	.	.	.	.	-/B	-B	-6	6	/B	B	.	.	.	.	.
$\chi_{12}^{(53)}$	15	D	/D	-/D	-15	-D	.	.	.	.	.	-M	-/M	3	-3	M	/M	-/A	-1	-A	A	/A
$\chi_{12}^{(54)}$	15	/D	D	-D	-15	-/D	.	.	.	.	.	-/M	-M	3	-3	/M	M	-A	-1	-/A	/A	A
$\chi_{12}^{(55)}$	20	20	20	20	20	20	-1	-1	-1	-1	-1	2	2	2	2	2	2	.	.	.	.	.
$\chi_{12}^{(56)}$	20	20	20	20	20	20	-1	-1	-1	-1	-1	2	2	2	2	2	2	.	.	.	.	.
$\chi_{12}^{(57)}$	20	20	20	-20	-20	-20	-1	-1	-1	1	1	1	-2	-2	-2	2	2	2
$\chi_{12}^{(58)}$	20	20	20	-20	-20	-20	-1	-1	-1	1	1	1	-2	-2	-2	2	2	2
$\chi_{12}^{(59)}$	20	20	20	20	20	20	-1	-1	-1	-1	-1	-7	-7	-7	-7	-7	-7	1	1	1	1	1	
$\chi_{12}^{(60)}$	20	20	20	-20	-20	-20	-1	-1	-1	1	1	7	7	7	-7	-7	-7	1	1	1	-1	-1	
$\chi_{12}^{(61)}$	20	E	/E	/E	20	E	-A	-/A	-1	-1	-A	-/A	N	/N	2	2	N	/N
$\chi_{12}^{(62)}$	20	/E	E	E	20	/E	-/A	-A	-1	-1	-/A	-A	/N	N	2	2	/N	N
$\chi_{12}^{(63)}$	20	E	/E	/E	20	E	-A	-/A	-1	-1	-A	-/A	N	/N	2	2	N	/N
$\chi_{12}^{(64)}$	20	/E	E	E	20	/E	-/A	-A	-1	-1	-/A	-A	/N	N	2	2	/N	N
$\chi_{12}^{(65)}$	20	E	/E	-/E	-20	-E	-A	-/A	-1	1	A	/A	-N	-/N	-2	2	N	/N
$\chi_{12}^{(66)}$	20	/E	E	-E	-20	-/E	-/A	-A	-1	1	/A	A	-/N	-N	-2	2	/N	N
$\chi_{12}^{(67)}$	20	E	/E	-/E	-20	-E	-A	-/A	-1	1	A	/A	-N	-/N	-2	2	N	/N
$\chi_{12}^{(68)}$	20	/E	E	-E	-20	-/E	-/A	-A	-1	1	/A	A	-/N	-N	-2	2	/N	N
$\chi_{12}^{(69)}$	20	E	/E	/E	20	E	-A	-/A	-1	-1	-A	-/A	O	/O	-7	-7	O	/O	/A	1	A	A	/A
$\chi_{12}^{(70)}$	20	/E	E	E	20	/E	-/A	-A	-1	-1	-/A	-A	/O	O	-7	-7	/O	O	A	1	/A	/A	A
$\chi_{12}^{(71)}$	20	E	/E	-/E	-20	-E	-A	-/A	-1	1	A	/A	-O	-/O	7	-7	O	/O	/A	1	A	-A	-/A
$\chi_{12}^{(72)}$	20	/E	E	-E	-20	-/E	-/A	-A	-1	1	/A	A	-/O	-O	7	-7	/O	O	A	1	/A	-/A	-A
$\chi_{12}^{(73)}$	24	24	24	24	24	24	.	.	.	.	.	6	6	6	6	6	6	.	.	.	.	.
$\chi_{12}^{(74)}$	24	24	24	24	24	24	.	.	.	.	.	6	6	6	6	6	6	.	.	.	.	.
$\chi_{12}^{(75)}$	24	24	24	-24	-24	-24	.	.	.	.	.	-6	-6	-6	6	6	6	.	.	.	.	.
$\chi_{12}^{(76)}$	24	24	24	-24	-24	-24	.	.	.	.	.	-6	-6	-6	6	6	6	.	.	.	.	.
$\chi_{12}^{(77)}$	24	F	/F	/F	24	F	.	.	.	.	.	B	/B	6	6	B	/B	.	.	.	.	.
$\chi_{12}^{(78)}$	24	/F	F	F	24	/F	.	.	.	.	.	/B	B	6	6	/B	B	.	.	.	.	.
$\chi_{12}^{(79)}$	24	F	/F	/F	24	F	.	.	.	.	.	B	/B	6	6	B	/B	.	.	.	.	.
$\chi_{12}^{(80)}$	24	/F	F	F	24	/F	.	.	.	.	.	/B	B	6	6	/B	B	.	.	.	.	.
$\chi_{12}^{(81)}$	24	F	/F	-/F	-24	-F	.	.	.	.	.	-B	-/B	-6	6	B	/B	.	.	.	.	.
$\chi_{12}^{(82)}$	24	/F	F	-F	-24	-/F	.	.	.	.	.	-/B	-B	-6	6	/B	B	.	.	.	.	.
$\chi_{12}^{(83)}$	24	F	/F	-/F	-24	-F	.	.	.	.	.	-B	-/B	-6	6	B	/B	.	.	.	.	.
$\chi_{12}^{(84)}$	24	/F	F	-F	-24	-/F	.	.	.	.	.	-/B	-B	-6	6	/B	B	.	.	.	.	.
$\chi_{12}^{(85)}$	30	30	30	30	30	30	.	.	.	.	.	3	3	3	3	3	3	1	1	1	1	1
$\chi_{12}^{(86)}$	30	30	30	30	30	30	.	.	.	.	.	3	3	3	3	3	3	1	1	1	1	1
$\chi_{12}^{(87)}$	30	30	30	-30	-30	-30	.	.	.	.	.	-3	-3	-3	3	3	3	1	1	1	-1	-1
$\chi_{12}^{(88)}$	30	30	30	-30	-30	-30	.	.	.	.	.	-3	-3	-3	3	3	3	1	1	1	-1	-1
$\chi_{12}^{(89)}$	30	G	/G	/G	30	G	.	.	.	.	.	-M	-/M	3	3	-M	-/M	/A	1	A	A	/A
$\chi_{12}^{(90)}$	30	/G	G	G	30	/G	.	.	.	.	.	-/M	-M	3	3	/M	-M	A	1	/A	/A	A

	10										20									
$\chi_{12}^{(136)}$	81	81	81	-81	-81	-81	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(137)}$	81	K	/K	/K	81	K	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(138)}$	81	/K	K	K	81	/K	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(139)}$	81	K	/K	/K	81	K	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(140)}$	81	/K	K	K	81	/K	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(141)}$	81	K	/K	-/K	-81	-K	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(142)}$	81	/K	K	-K	-81	-/K	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(143)}$	81	K	/K	-/K	-81	-K	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(144)}$	81	/K	K	-K	-81	-/K	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(145)}$	90	90	90	90	90	90	.	.	.	.	9	9	9	9	9	9	-1	-1	-1	-1
$\chi_{12}^{(146)}$	90	90	90	-90	-90	-90	.	.	.	.	-9	-9	-9	9	9	9	-1	-1	-1	1
$\chi_{12}^{(147)}$	90	L	/L	/L	90	L	.	.	.	.	Q	/Q	9	9	Q	/Q	-/A	-1	-A	-A
$\chi_{12}^{(148)}$	90	/L	L	L	90	/L	/Q	Q	9	9	/Q	Q	-A	-1	-/A	-/A
$\chi_{12}^{(149)}$	90	L	/L	-/L	-90	-L	-Q	-/Q	-9	9	Q	/Q	-/A	-1	-A	A
$\chi_{12}^{(150)}$	90	/L	L	-L	-90	-/L	-/Q	-Q	-9	9	/Q	Q	-A	-1	-/A	/A
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$\chi_{12}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{12}^{(2)}$	-1	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	1
$\chi_{12}^{(3)}$	-1	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	1
$\chi_{12}^{(4)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{12}^{(5)}$	-1	-/A	-1	-A	A	/A	1	/A	1	A	-A	-/A	-1	A	/A	1	-1	-A	-/A	A
$\chi_{12}^{(6)}$	-1	-A	-1	-/A	/A	A	1	A	1	/A	-/A	-A	-1	/A	A	1	-1	-/A	-A	/A
$\chi_{12}^{(7)}$	-1	-/A	-1	-A	A	/A	1	/A	1	A	-A	-/A	-1	A	/A	1	-1	-A	-/A	A
$\chi_{12}^{(8)}$	-1	-A	-1	-/A	/A	A	1	A	1	/A	-/A	-A	-1	/A	A	1	-1	-/A	-A	/A
$\chi_{12}^{(9)}$	1	/A	1	A	A	/A	1	/A	1	A	A	/A	1	A	/A	1	1	A	/A	A
$\chi_{12}^{(10)}$	1	A	1	/A	/A	A	1	A	1	/A	/A	A	1	/A	A	1	1	/A	A	/A
$\chi_{12}^{(11)}$	1	/A	1	A	A	/A	1	/A	1	A	A	/A	1	A	/A	1	1	A	/A	A
$\chi_{12}^{(12)}$	1	A	1	/A	/A	A	1	A	1	/A	/A	A	1	/A	A	1	1	/A	A	/A
$\chi_{12}^{(13)}$	-1	1	1	1	1	1	1	-2	-2	-2	-2	-2	-2	2	2	2	2	2	2	1
$\chi_{12}^{(14)}$	-1	1	1	1	1	1	1	-2	-2	-2	-2	-2	-2	2	2	2	2	2	2	1
$\chi_{12}^{(15)}$	1	-1	-1	-1	1	1	1	-2	-2	-2	2	2	2	2	2	2	-2	-2	-2	1
$\chi_{12}^{(16)}$	1	-1	-1	-1	1	1	1	-2	-2	-2	2	2	2	2	2	2	-2	-2	-2	1
$\chi_{12}^{(17)}$	-1	/A	1	A	A	/A	1	-/N	-2	-N	-N	-/N	-2	N	/N	2	2	N	/N	A
$\chi_{12}^{(18)}$	-1	A	1	/A	/A	A	1	-N	-2	-/N	-/N	-N	-2	/N	N	2	2	/N	N	/A
$\chi_{12}^{(19)}$	-1	/A	1	A	A	/A	1	-/N	-2	-N	-N	-/N	-2	N	/N	2	2	N	/N	A
$\chi_{12}^{(20)}$	-1	A	1	/A	/A	A	1	-N	-2	-/N	-/N	-N	-2	/N	N	2	2	/N	N	/A
$\chi_{12}^{(21)}$	1	-/A	-1	-A	A	/A	1	-/N	-2	-N	N	/N	2	N	/N	2	-2	-N	-/N	A
$\chi_{12}^{(22)}$	1	-A	-1	-/A	/A	A	1	-N	-2	-/N	/N	N	2	/N	N	2	-2	-/N	-N	/A
$\chi_{12}^{(23)}$	1	-/A	-1	-A	A	/A	1	-/N	-2	-N	N	/N	2	N	/N	2	-2	-N	-/N	A
$\chi_{12}^{(24)}$	1	-A	-1	-/A	/A	A	1	-N	-2	-/N	/N	N	2	/N	N	2	-2	-/N	-N	/A
$\chi_{12}^{(25)}$	-1	-3	-3	-3	-3	-3	-3	-6	-6	-6	-6	-6	-6	2	2	2	2	2	2	.
$\chi_{12}^{(26)}$	1	3	3	3	-3	-3	-3	-6	-6	-6	6	6	6	2	2	2	-2	-2	-2	.
$\chi_{12}^{(27)}$	-1	/M	-3	M	M	/M	-3	-/B	-6	-B	-B	-/B	-6	N	/N	2	2	N	/N	.
$\chi_{12}^{(28)}$	-1	M	-3	/M	/M	M	-3	-B	-6	-/B	-/B	-B	-6	/N	N	2	2	/N	N	.
$\chi_{12}^{(29)}$	1	-/M	3	-M	M	/M	-3	-/B	-6	-B	B	/B	6	N	/N	2	-2	-N	-/N	.
$\chi_{12}^{(30)}$	1	-M	3	-/M	/M	M	-3	-B	-6	-/B	/B	B	6	/N	N	2	-2	-/N	-N	.

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$\chi_{12}^{(31)}$.	2	2	2	2	2	2	-1	-1	-1	-1	-1	-1	3	3	3	3	3	3	
$\chi_{12}^{(32)}$	-1	1	1	1	1	1	1	7	7	7	7	7	7	-1	-1	-1	-1	-1	-1	
$\chi_{12}^{(33)}$.	2	2	2	2	2	2	-1	-1	-1	-1	-1	-1	3	3	3	3	3	3	
$\chi_{12}^{(34)}$	-1	1	1	1	1	1	1	7	7	7	7	7	7	-1	-1	-1	-1	-1	-1	.	.	.	.
$\chi_{12}^{(35)}$	.	-2	-2	-2	2	2	2	-1	-1	-1	1	1	1	3	3	3	-3	-3	-3	.	.	.	.
$\chi_{12}^{(36)}$	1	-1	-1	-1	1	1	1	7	7	7	-7	-7	-7	-1	-1	-1	1	1	1	.	.	.	.
$\chi_{12}^{(37)}$	.	-2	-2	-2	2	2	2	-1	-1	-1	1	1	1	3	3	3	-3	-3	-3	.	.	.	.
$\chi_{12}^{(38)}$	1	-1	-1	-1	1	1	1	7	7	7	-7	-7	-7	-1	-1	-1	1	1	1	.	.	.	.
$\chi_{12}^{(39)}$	.	/N	2	N	N	/N	2	-/A	-1	-A	-A	-/A	-1	-M	-/M	3	3	-M	-/M	.	.	.	.
$\chi_{12}^{(40)}$	.	N	2	/N	/N	N	2	-A	-1	-/A	-/A	-A	-1	-/M	-M	3	3	-/M	-M	.	.	.	.
$\chi_{12}^{(41)}$	-1	/A	1	A	A	/A	1	-/O	7	-O	-O	-/O	7	-A	-/A	-1	-1	-A	-/A	.	.	.	.
$\chi_{12}^{(42)}$	-1	A	1	/A	/A	A	1	-O	7	-/O	-/O	-O	7	-/A	-A	-1	-1	-/A	-A	.	.	.	.
$\chi_{12}^{(43)}$	.	/N	2	N	N	/N	2	-/A	-1	-A	-A	-/A	-1	-M	-/M	3	3	-M	-/M	.	.	.	.
$\chi_{12}^{(44)}$	.	N	2	/N	/N	N	2	-A	-1	-/A	-/A	-A	-1	-/M	-M	3	3	-/M	-M	.	.	.	.
$\chi_{12}^{(45)}$	-1	/A	1	A	A	/A	1	-/O	7	-O	-O	-/O	7	-A	-/A	-1	-1	-A	-/A	.	.	.	.
$\chi_{12}^{(46)}$	-1	A	1	/A	/A	A	1	-O	7	-/O	-/O	-O	7	-/A	-A	-1	-1	-/A	-A	.	.	.	.
$\chi_{12}^{(47)}$	.	-/N	-2	-N	N	/N	2	-/A	-1	-A	A	/A	1	-M	-/M	3	-3	M	/M	.	.	.	.
$\chi_{12}^{(48)}$	.	-N	-2	-/N	/N	N	2	-A	-1	-/A	/A	A	1	-/M	-M	3	-3	/M	M	.	.	.	.
$\chi_{12}^{(49)}$	1	-/A	-1	-A	A	/A	1	-/O	7	-O	O	/O	-7	-A	-/A	-1	1	A	/A	.	.	.	.
$\chi_{12}^{(50)}$	1	-A	-1	-/A	/A	A	1	-O	7	-/O	/O	O	-7	-/A	-A	-1	1	/A	A	.	.	.	.
$\chi_{12}^{(51)}$	.	-/N	-2	-N	N	/N	2	-/A	-1	-A	A	/A	1	-M	-/M	3	-3	M	/M	.	.	.	.
$\chi_{12}^{(52)}$	.	-N	-2	-/N	/N	N	2	-A	-1	-/A	/A	A	1	-/M	-M	3	-3	/M	M	.	.	.	.
$\chi_{12}^{(53)}$	1	-/A	-1	-A	A	/A	1	-/O	7	-O	O	/O	-7	-A	-/A	-1	1	A	/A	.	.	.	.
$\chi_{12}^{(54)}$	1	-A	-1	-/A	/A	A	1	-O	7	-/O	/O	O	-7	-/A	-A	-1	1	/A	A	.	.	.	.
$\chi_{12}^{(55)}$	.	-2	-2	-2	-2	-2	-2	4	4	4	4	4	4	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(56)}$	.	-2	-2	-2	-2	-2	-2	4	4	4	4	4	4	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(57)}$	.	2	2	2	-2	-2	-2	4	4	4	-4	-4	-4	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(58)}$	.	2	2	2	-2	-2	-2	4	4	4	-4	-4	-4	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(59)}$	1	1	1	1	1	1	1	4	4	4	4	4	4	4	4	4	4	4	4	.	.	.	.
$\chi_{12}^{(60)}$	-1	-1	-1	-1	1	1	1	4	4	4	-4	-4	-4	4	4	4	-4	-4	-4	.	.	.	.
$\chi_{12}^{(61)}$	.	-/N	-2	-N	-N	-/N	-2	R	4	/R	/R	R	4	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(62)}$	.	-N	-2	-/N	-/N	-N	-2	/R	4	R	R	/R	4	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(63)}$	.	-/N	-2	-N	-N	-/N	-2	R	4	/R	/R	R	4	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(64)}$	.	-N	-2	-/N	-/N	-N	-2	/R	4	R	R	/R	4	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(65)}$	.	/N	2	N	-N	-/N	-2	R	4	/R	-/R	-R	-4	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(66)}$	.	N	2	/N	-/N	-N	-2	/R	4	R	-R	-/R	-4	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(67)}$	.	/N	2	N	-N	-/N	-2	R	4	/R	-/R	-R	-4	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(68)}$	.	N	2	/N	-/N	-N	-2	/R	4	R	-R	-/R	-4	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(69)}$	1	/A	1	A	A	/A	1	R	4	/R	/R	R	4	/R	R	4	4	/R	R	.	.	.	.
$\chi_{12}^{(70)}$	1	A	1	/A	/A	A	1	/R	4	R	R	/R	4	R	/R	4	4	R	/R	.	.	.	.
$\chi_{12}^{(71)}$	-1	-/A	-1	-A	A	/A	1	R	4	/R	-/R	-R	-4	/R	R	4	-4	-/R	-R	.	.	.	.
$\chi_{12}^{(72)}$	-1	-A	-1	-/A	/A	A	1	/R	4	R	-R	-/R	-4	R	/R	4	-4	-R	-/R	.	.	.	.
$\chi_{12}^{(73)}$.	2	2	2	2	2	2	8	8	8	8	8	8	-1	-1	-1	-1	
$\chi_{12}^{(74)}$.	2	2	2	2	2	2	8	8	8	8	8	8	-1	-1	-1	-1	
$\chi_{12}^{(75)}$.	-2	-2	-2	2	2	2	8	8	8	-8	-8	-8	-1	-1	-1	1	

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$\chi_{12}^{(76)}$.	-2	-2	-2	2	2	2	8	8	8	-8	-8	-8	-1	-1	-1	1
$\chi_{12}^{(77)}$.	/N	2	N	N	/N	2	-/P	8	-P	-P	-/P	8	-A	-/A	-1	-1
$\chi_{12}^{(78)}$.	N	2	/N	/N	N	2	-P	8	-/P	-/P	-P	8	-/A	-A	-1	-1
$\chi_{12}^{(79)}$	.	/N	2	N	N	/N	2	-/P	8	-P	-P	-/P	8	.	.	.	.	.	.	-A	-/A	-1	-1
$\chi_{12}^{(80)}$	.	N	2	/N	/N	N	2	-P	8	-/P	-/P	-P	8	.	.	.	.	.	.	-/A	-A	-1	-1
$\chi_{12}^{(81)}$	.	-/N	-2	-N	N	/N	2	-/P	8	-P	P	/P	-8	.	.	.	.	.	.	-A	-/A	-1	1
$\chi_{12}^{(82)}$	.	-N	-2	-/N	/N	N	2	-P	8	-/P	/P	P	-8	.	.	.	.	.	.	-/A	-A	-1	1
$\chi_{12}^{(83)}$	.	-/N	-2	-N	N	/N	2	-/P	8	-P	P	/P	-8	.	.	.	.	.	.	-A	-/A	-1	1
$\chi_{12}^{(84)}$	.	-N	-2	-/N	/N	N	2	-P	8	-/P	/P	P	-8	.	.	.	.	.	.	-/A	-A	-1	1
$\chi_{12}^{(85)}$	1	-1	-1	-1	-1	-1	-1	-10	-10	-10	-10	-10	-10	-2	-2	-2	-2	-2	-2	.	.	.	.
$\chi_{12}^{(86)}$	1	-1	-1	-1	-1	-1	-1	-10	-10	-10	-10	-10	-10	-2	-2	-2	-2	-2	-2	.	.	.	.
$\chi_{12}^{(87)}$	-1	1	1	1	-1	-1	-1	-10	-10	-10	10	10	10	-2	-2	-2	2	2	2	.	.	.	.
$\chi_{12}^{(88)}$	-1	1	1	1	-1	-1	-1	-10	-10	-10	10	10	10	-2	-2	-2	2	2	2	.	.	.	.
$\chi_{12}^{(89)}$	1	-/A	-1	-A	-A	-/A	-1	-/C	-10	-C	-C	-/C	-10	-N	-/N	-2	-2	-N	-/N	.	.	.	.
$\chi_{12}^{(90)}$	1	-A	-1	-/A	-/A	-A	-1	-C	-10	-/C	-/C	-C	-10	-/N	-N	-2	-2	-/N	-N	.	.	.	.
$\chi_{12}^{(91)}$	1	-/A	-1	-A	-A	-/A	-1	-/C	-10	-C	-C	-/C	-10	-N	-/N	-2	-2	-N	-/N	.	.	.	.
$\chi_{12}^{(92)}$	1	-A	-1	-/A	-/A	-A	-1	-C	-10	-/C	-/C	-C	-10	-/N	-N	-2	-2	-/N	-N	.	.	.	.
$\chi_{12}^{(93)}$	-1	/A	1	A	-A	-/A	-1	-/C	-10	-C	C	/C	10	-N	-/N	-2	2	N	/N	.	.	.	.
$\chi_{12}^{(94)}$	-1	A	1	/A	-/A	-A	-1	-C	-10	-/C	/C	C	10	-/N	-N	-2	2	/N	N	.	.	.	.
$\chi_{12}^{(95)}$	-1	/A	1	A	-A	-/A	-1	-/C	-10	-C	C	/C	10	-N	-/N	-2	2	N	/N	.	.	.	.
$\chi_{12}^{(96)}$	-1	A	1	/A	-/A	-A	-1	-C	-10	-/C	/C	C	10	-/N	-N	-2	2	/N	N	.	.	.	.
$\chi_{12}^{(97)}$	.	2	2	2	2	2	2	-4	-4	-4	-4	-4	-4	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(98)}$	.	2	2	2	2	2	2	-4	-4	-4	-4	-4	-4	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(99)}$	.	-2	-2	-2	2	2	2	-4	-4	-4	4	4	4	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(100)}$	.	-2	-2	-2	2	2	2	-4	-4	-4	4	4	4	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(101)}$	1	-3	-3	-3	-3	-3	-3	12	12	12	12	12	12	4	4	4	4	4	4	.	.	.	.
$\chi_{12}^{(102)}$	-1	3	3	3	-3	-3	-3	12	12	12	-12	-12	-12	4	4	4	-4	-4	-4	.	.	.	.
$\chi_{12}^{(103)}$	.	/N	2	N	N	/N	2	-R	-4	-/R	-/R	-R	-4	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(104)}$	.	N	2	/N	/N	N	2	-/R	-4	-R	-R	-/R	-4	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(105)}$	.	/N	2	N	N	/N	2	-R	-4	-/R	-/R	-R	-4	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(106)}$	.	N	2	/N	/N	N	2	-/R	-4	-R	-R	-/R	-4	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(107)}$	.	-/N	-2	-N	N	/N	2	-R	-4	-/R	/R	R	4	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(108)}$	.	-N	-2	-/N	/N	N	2	-/R	-4	-R	R	/R	4	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(109)}$	.	-/N	-2	-N	N	/N	2	-R	-4	-/R	/R	R	4	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(110)}$	.	-N	-2	-/N	/N	N	2	-/R	-4	-R	R	/R	4	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(111)}$	1	/M	-3	M	M	/M	-3	S	12	/S	/S	S	12	/R	R	4	4	/R	R	.	.	.	.
$\chi_{12}^{(112)}$	1	M	-3	/M	/M	M	-3	/S	12	S	S	/S	12	R	/R	4	4	R	/R	.	.	.	.
$\chi_{12}^{(113)}$	-1	-/M	3	-M	M	/M	-3	S	12	/S	-/S	-S	-12	/R	R	4	-4	-/R	-R	.	.	.	.
$\chi_{12}^{(114)}$	-1	-M	3	-/M	/M	M	-3	/S	12	S	-S	-/S	-12	R	/R	4	-4	-R	-/R	.	.	.	.
$\chi_{12}^{(115)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	-1	-1	-1
$\chi_{12}^{(116)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	-1	-1	-1
$\chi_{12}^{(117)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	-1	-1	1
$\chi_{12}^{(118)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	-1	-1	1
$\chi_{12}^{(119)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-A	-/A	-1	-1
$\chi_{12}^{(120)}$	-/A	-A	-1	-1
$\chi_{12}^{(121)}$	-A	-/A	-1	-1
$\chi_{12}^{(122)}$	-/A	-A	-1	-1
$\chi_{12}^{(123)}$	-A	-/A	-1	1
$\chi_{12}^{(124)}$	-/A	-A	-1	1
$\chi_{12}^{(125)}$	-A	-/A	-1	1

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$\chi_{12}^{(21)}$	-A	-/A	/A	1	A	-A	-/A	-1	R	4	/R	-/R	-R	-4	
$\chi_{12}^{(22)}$	-/A	-A	A	1	/A	-/A	-A	-1	/R	4	R	-R	-/R	-4	
$\chi_{12}^{(23)}$	-A	-/A	-/A	-1	-A	A	/A	1	-R	-4	-/R	/R	R	4	
$\chi_{12}^{(24)}$	-/A	-A	-A	-1	-/A	/A	A	1	-/R	-4	-R	R	/R	4	
$\chi_{12}^{(25)}$	4	4	4	4	
$\chi_{12}^{(26)}$	4	4	4	4	
$\chi_{12}^{(27)}$	4	/R	R	R	
$\chi_{12}^{(28)}$	4	R	/R	/R	
$\chi_{12}^{(29)}$	4	/R	R	R	
$\chi_{12}^{(30)}$	4	R	/R	/R	
$\chi_{12}^{(31)}$	-5	-5	-5	-5	-5	-5	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(32)}$	-5	-5	-5	-5	-5	-5	-1	-1	-1	-1	-1	-1	3	3	3	
$\chi_{12}^{(33)}$	5	5	5	5	5	5	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(34)}$	5	5	5	5	5	5	1	1	1	1	1	1	3	3	3	
$\chi_{12}^{(35)}$	5	5	5	-5	-5	-5	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(36)}$	5	5	5	-5	-5	-5	1	1	1	-1	-1	-1	3	3	3	
$\chi_{12}^{(37)}$	-5	-5	-5	5	5	5	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(38)}$	-5	-5	-5	5	5	5	-1	-1	-1	1	1	1	3	3	3	
$\chi_{12}^{(39)}$	U	-5	/U	/U	U	-5	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(40)}$	/U	-5	U	U	/U	-5	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(41)}$	U	-5	/U	/U	U	-5	-1	-A	-/A	-/A	-1	-A	3	-M	-/M	
$\chi_{12}^{(42)}$	/U	-5	U	U	/U	-5	-1	-/A	-A	-A	-1	-/A	3	-/M	-M	
$\chi_{12}^{(43)}$	-U	5	-/U	-/U	-U	5	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(44)}$	-/U	5	-U	-U	-/U	5	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(45)}$	-U	5	-/U	-/U	-U	5	1	A	/A	/A	1	A	3	-M	-/M	
$\chi_{12}^{(46)}$	-/U	5	-U	-U	-/U	5	1	/A	A	A	1	/A	3	-/M	-M	
$\chi_{12}^{(47)}$	-U	5	-/U	/U	U	-5	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(48)}$	-/U	5	-U	U	/U	-5	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(49)}$	-U	5	-/U	/U	U	-5	1	A	/A	-/A	-1	-A	3	-M	-/M	
$\chi_{12}^{(50)}$	-/U	5	-U	U	/U	-5	1	/A	A	-A	-1	-/A	3	-/M	-M	
$\chi_{12}^{(51)}$	U	-5	/U	-/U	-U	5	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(52)}$	/U	-5	U	-U	-/U	5	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(53)}$	U	-5	/U	-/U	-U	5	-1	-A	-/A	/A	1	A	3	-M	-/M	
$\chi_{12}^{(54)}$	/U	-5	U	-U	-/U	5	-1	-/A	-A	A	1	/A	3	-/M	-M	
$\chi_{12}^{(55)}$	-10	-10	-10	-10	-10	-10	1	1	1	1	1	1	-1	-1	-1	
$\chi_{12}^{(56)}$	10	10	10	10	10	10	-1	-1	-1	-1	-1	-1	-1	-1	-1	
$\chi_{12}^{(57)}$	10	10	10	-10	-10	-10	-1	-1	-1	1	1	1	-1	-1	-1	
$\chi_{12}^{(58)}$	-10	-10	-10	10	10	10	1	1	1	-1	-1	-1	-1	-1	-1	
$\chi_{12}^{(59)}$	2	2	2	
$\chi_{12}^{(60)}$	2	2	2	
$\chi_{12}^{(61)}$	-/C	-10	-C	-C	-/C	-10	1	A	/A	/A	1	A	-1	-A	-/A	
$\chi_{12}^{(62)}$	-C	-10	-/C	-/C	-C	-10	1	/A	A	A	1	/A	-1	-/A	-A	
$\chi_{12}^{(63)}$	/C	10	C	C	/C	10	-1	-A	-/A	-/A	-1	-A	-1	-A	-/A	
$\chi_{12}^{(64)}$	C	10	/C	/C	C	10	-1	-/A	-A	-A	-1	-/A	-1	-/A	-A	
$\chi_{12}^{(65)}$	/C	10	C	-C	-/C	-10	-1	-A	-/A	/A	1	A	-1	-A	-/A	

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$\chi_{12}^{(66)}$	C	10	/C	-/C	-C	-10	-1	-/A	-A	A	1	/A	-1	-/A	-A	
$\chi_{12}^{(67)}$	-/C	-10	-C	C	/C	10	1	A	/A	-/A	-1	-A	-1	-A	-/A	
$\chi_{12}^{(68)}$	-C	-10	-/C	/C	C	10	1	/A	A	-A	-1	-/A	-1	-/A	-A	
$\chi_{12}^{(69)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2	N	/N	
$\chi_{12}^{(70)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2	/N	N	
$\chi_{12}^{(71)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2	N	/N	
$\chi_{12}^{(72)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2	/N	N	
$\chi_{12}^{(73)}$	-1	-1	1	1	1	1	1	-4	-4	-4	-4	-4	-4	-1	-1	-1	-1	-1	-1	3	3	3	
$\chi_{12}^{(74)}$	-1	-1	-1	-1	-1	-1	-1	4	4	4	4	4	4	1	1	1	1	1	1	3	3	3	
$\chi_{12}^{(75)}$	1	1	1	1	1	-1	-1	4	4	4	-4	-4	-4	1	1	1	-1	-1	-1	3	3	3	
$\chi_{12}^{(76)}$	1	1	-1	-1	-1	1	1	1	-4	-4	-4	4	4	4	-1	-1	-1	1	1	1	3	3	3
$\chi_{12}^{(77)}$	-A	-/A	/A	1	A	A	/A	1	-R	-4	-/R	-/R	-R	-4	-1	-A	-/A	-/A	-1	-A	3	-M	-/M
$\chi_{12}^{(78)}$	-/A	-A	A	1	/A	/A	A	1	-/R	-4	-R	-R	-/R	-4	-1	-/A	-A	-A	-1	-/A	3	-/M	-M
$\chi_{12}^{(79)}$	-A	-/A	-/A	-1	-A	-A	-/A	-1	R	4	/R	/R	R	4	1	A	/A	/A	1	A	3	-M	-/M
$\chi_{12}^{(80)}$	-/A	-A	-A	-1	-/A	-/A	-A	-1	/R	4	R	R	/R	4	1	/A	A	A	1	/A	3	-/M	-M
$\chi_{12}^{(81)}$	A	/A	/A	1	A	-A	-/A	-1	R	4	/R	-/R	-R	-4	1	A	/A	-/A	-1	-A	3	-M	-/M
$\chi_{12}^{(82)}$	/A	A	A	1	/A	-/A	-A	-1	/R	4	R	-R	-/R	-4	1	/A	A	-A	-1	-/A	3	-/M	-M
$\chi_{12}^{(83)}$	A	/A	-/A	-1	-A	A	/A	1	-R	-4	-/R	/R	R	4	-1	-A	-/A	/A	1	A	3	-M	-/M
$\chi_{12}^{(84)}$	/A	A	-A	-1	-/A	/A	A	1	-/R	-4	-R	R	/R	4	-1	-/A	-A	A	1	/A	3	-/M	-M
$\chi_{12}^{(85)}$	.	.	.	.	.	.	.	-10	-10	-10	-10	-10	-10	-1	-1	-1	-1	-1	-1	3	3	3
$\chi_{12}^{(86)}$	.	.	.	.	.	.	.	10	10	10	10	10	10	1	1	1	1	1	1	3	3	3
$\chi_{12}^{(87)}$	.	.	.	.	.	.	.	10	10	10	-10	-10	-10	1	1	1	-1	-1	-1	3	3	3
$\chi_{12}^{(88)}$	.	.	.	.	.	.	.	-10	-10	-10	10	10	10	-1	-1	-1	1	1	1	3	3	3
$\chi_{12}^{(89)}$	.	.	.	.	.	.	.	-/C	-10	-C	-C	-/C	-10	-1	-A	-/A	-/A	-1	-A	3	-M	-/M
$\chi_{12}^{(90)}$	.	.	.	.	.	.	.	-C	-10	-/C	-/C	-C	-10	-1	-/A	-A	-A	-1	-/A	3	-/M	-M
$\chi_{12}^{(91)}$	.	.	.	.	.	.	.	/C	10	C	C	/C	10	1	A	/A	/A	1	A	3	-M	-/M
$\chi_{12}^{(92)}$	.	.	.	.	.	.	.	C	10	/C	/C	C	10	1	/A	A	A	1	/A	3	-/M	-M
$\chi_{12}^{(93)}$	.	.	.	.	.	.	.	/C	10	C	-C	-/C	-10	1	A	/A	-/A	-1	-A	3	-M	-/M
$\chi_{12}^{(94)}$	.	.	.	.	.	.	.	C	10	/C	-/C	-C	-10	1	/A	A	-A	-1	-/A	3	-/M	-M
$\chi_{12}^{(95)}$	.	.	.	.	.	.	.	-/C	-10	-C	C	/C	10	-1	-A	-/A	/A	1	A	3	-M	-/M
$\chi_{12}^{(96)}$	.	.	.	.	.	.	.	-C	-10	-/C	/C	C	10	-1	-/A	-A	A	1	/A	3	-/M	-M
$\chi_{12}^{(97)}$	.	.	.	.	.	.	.	-10	-10	-10	-10	-10	-10	1	1	1	1	1	1	-3	-3	-3
$\chi_{12}^{(98)}$	.	.	.	.	.	.	.	10	10	10	10	10	10	-1	-1	-1	-1	-1	-1	-3	-3	-3
$\chi_{12}^{(99)}$	.	.	.	.	.	.	.	10	10	10	-10	-10	-10	-1	-1	-1	1	1	1	-3	-3	-3
$\chi_{12}^{(100)}$	.	.	.	.	.	.	.	-10	-10	-10	10	10	10	1	1	1	-1	-1	-1	-3	-3	-3
$\chi_{12}^{(101)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(102)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(103)}$	.	.	.	.	.	.	.	-/C	-10	-C	-C	-/C	-10	1	A	/A	/A	1	A	-3	M	/M
$\chi_{12}^{(104)}$	.	.	.	.	.	.	.	-C	-10	-/C	-/C	-C	-10	1	/A	A	A	1	/A	-3	/M	M
$\chi_{12}^{(105)}$	.	.	.	.	.	.	.	/C	10	C	C	/C	10	-1	-A	-/A	-/A	-1	-A	-3	M	/M
$\chi_{12}^{(106)}$	.	.	.	.	.	.	.	C	10	/C	/C	C	10	-1	-/A	-A	-A	-1	-/A	-3	/M	M
$\chi_{12}^{(107)}$	.	.	.	.	.	.	.	/C	10	C	-C	-/C	-10	-1	-A	-/A	/A	1	A	-3	M	/M
$\chi_{12}^{(108)}$	C	10	/C	-/C	-C	-10	-1	-/A	-A	A	1	/A	-3	/M	M	
$\chi_{12}^{(109)}$	-/C	-10	-C	C	/C	10	1	A	/A	-/A	-1	-A	-3	M	/M	
$\chi_{12}^{(110)}$	-C	-10	-/C	/C	C	10	1	/A	A	-A	-1	-/A	-3	/M	M	

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$\chi_{12}^{(46)}$	-M	3	-/M	/A	A	1	1	/A	A
$\chi_{12}^{(47)}$.	.	.	-M	-/M	3	-3	M	/M	/A	1	A	-A	-/A	-1	1	A	/A	-/A	-1	-A	3	-M	
$\chi_{12}^{(48)}$.	.	.	-/M	-M	3	-3	/M	M	A	1	/A	-/A	-A	-1	1	/A	A	-A	-1	-/A	3	-/M	
$\chi_{12}^{(49)}$	/M	-3	M	-A	-/A	-1	1	A	/A	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(50)}$	M	-3	/M	-/A	-A	-1	1	/A	A	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(51)}$	.	.	.	M	/M	-3	3	-M	-/M	-/A	-1	-A	A	/A	1	1	A	/A	-/A	-1	-A	3	-M	
$\chi_{12}^{(52)}$	.	.	.	/M	M	-3	3	-/M	-M	-A	-1	-/A	/A	A	1	1	/A	A	-A	-1	-/A	3	-/M	
$\chi_{12}^{(53)}$	/M	-3	M	A	/A	1	-1	-A	-/A	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(54)}$	M	-3	/M	/A	A	1	-1	-/A	-A	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(55)}$	-1	-1	-1	-2	-2	-2	-2	-2	-2	1	1	1	1	1	1	1	1	1	1	1	1	5	5	
$\chi_{12}^{(56)}$	-1	-1	-1	2	2	2	2	2	2	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	5	5	
$\chi_{12}^{(57)}$	1	1	1	-2	-2	-2	2	2	2	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	5	5	
$\chi_{12}^{(58)}$	1	1	1	2	2	2	-2	-2	-2	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1	5	5	
$\chi_{12}^{(59)}$	2	2	2	.	.	.	.	.	.	.	.	.	.	.	.	2	2	2	2	2	2	2	2	2
$\chi_{12}^{(60)}$	-2	-2	-2	.	.	.	.	.	.	.	.	.	.	.	.	-2	-2	-2	2	2	2	2	2	2
$\chi_{12}^{(61)}$	-/A	-1	-A	-N	-/N	-2	-2	-N	-/N	/A	1	A	A	/A	1	1	A	/A	/A	1	A	5	-/U	
$\chi_{12}^{(62)}$	-A	-1	-/A	-/N	-N	-2	-2	-/N	-N	A	1	/A	/A	A	1	1	/A	A	A	1	/A	5	-U	
$\chi_{12}^{(63)}$	-/A	-1	-A	N	/N	2	2	N	/N	-/A	-1	-A	-A	-/A	-1	1	A	/A	/A	1	A	5	-/U	
$\chi_{12}^{(64)}$	-A	-1	-/A	/N	N	2	2	/N	N	-A	-1	-/A	-/A	-A	-1	1	/A	A	A	1	/A	5	-U	
$\chi_{12}^{(65)}$	/A	1	A	-N	-/N	-2	2	N	/N	-/A	-1	-A	A	/A	1	-1	-A	-/A	/A	1	A	5	-/U	
$\chi_{12}^{(66)}$	A	1	/A	-/N	-N	-2	2	/N	N	-A	-1	-/A	/A	A	1	-1	-/A	-A	A	1	/A	5	-U	
$\chi_{12}^{(67)}$	/A	1	A	N	/N	2	-2	-N	-/N	/A	1	A	-A	-/A	-1	-1	-A	-/A	/A	1	A	5	-/U	
$\chi_{12}^{(68)}$	A	1	/A	/N	N	2	-2	-/N	-N	A	1	/A	-/A	-A	-1	-1	-/A	-A	A	1	/A	5	-U	
$\chi_{12}^{(69)}$	/N	2	N	.	.	.	.	.	.	.	.	.	.	.	.	2	N	/N	/N	2	N	2	N	
$\chi_{12}^{(70)}$	N	2	/N	.	.	.	.	.	.	.	.	.	.	.	.	2	/N	N	N	2	/N	2	/N	
$\chi_{12}^{(71)}$	-/N	-2	-N	.	.	.	.	.	.	.	.	.	.	.	.	-2	-N	-/N	/N	2	N	2	N	
$\chi_{12}^{(72)}$	-N	-2	-/N	.	.	.	.	.	.	.	.	.	.	.	.	-2	-/N	-N	N	2	/N	2	/N	
$\chi_{12}^{(73)}$	3	3	3	-4	-4	-4	-4	-4	-4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(74)}$	3	3	3	4	4	4	4	4	4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(75)}$	-3	-3	-3	-4	-4	-4	4	4	4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(76)}$	-3	-3	-3	4	4	4	-4	-4	-4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(77)}$	-/M	3	-M	-/R	-R	-4	-4	-/R	-R	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(78)}$	-M	3	-/M	-R	-/R	-4	-4	-R	-/R	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(79)}$	-/M	3	-M	/R	R	4	4	/R	R	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(80)}$	-M	3	-/M	R	/R	4	4	R	/R	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(81)}$	/M	-3	M	-/R	-R	-4	4	/R	R	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(82)}$	M	-3	/M	-R	-/R	-4	4	R	/R	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(83)}$	/M	-3	M	/R	R	4	-4	-/R	-R	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(84)}$	M	-3	/M	R	/R	4	-4	-R	-/R	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(85)}$	3	3	3	2	2	2	2	2	2	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	3	3	
$\chi_{12}^{(86)}$	3	3	3	-2	-2	-2	-2	-2	-2	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	3	3	
$\chi_{12}^{(87)}$	-3	-3	-3	2	2	2	-2	-2	-2	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	3	3	
$\chi_{12}^{(88)}$	-3	-3	-3	-2	-2	-2	2	2	2	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	3	3	
$\chi_{12}^{(89)}$	-/M	3	-M	N	/N	2	2	N	/N	/A	1	A	A	/A	1	-1	-A	-/A	-/A	-1	-A	3	-M	
$\chi_{12}^{(90)}$	-M	3	-/M	/N	N	2	2	/N	N	A	1	/A	/A	A	1	-1	-/A	-A	-A	-1	-/A	3	-/M	

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$\chi_{12}^{(91)}$	-/M	3	-M	-N	-/N	-2	-2	-N	-/N	-/A	-1	-A	-A	-/A	-1	-1	-A	-/A	-/A	-1	-A	3	-M	
$\chi_{12}^{(92)}$	-M	3	-/M	-/N	-N	-2	-2	-/N	-N	-A	-1	-/A	-/A	-A	-1	-1	-/A	-A	-A	-1	-/A	3	-/M	
$\chi_{12}^{(93)}$	/M	-3	M	N	/N	2	-2	-N	-/N	-/A	-1	-A	A	/A	1	1	A	/A	-/A	-1	-A	3	-M	
$\chi_{12}^{(94)}$	M	-3	/M	/N	N	2	-2	-/N	-N	-A	-1	-/A	/A	A	1	1	/A	A	-A	-1	-/A	3	-/M	
$\chi_{12}^{(95)}$	/M	-3	M	-N	-/N	-2	2	N	/N	/A	1	A	-A	-/A	-1	1	A	/A	-/A	-1	-A	3	-M	
$\chi_{12}^{(96)}$	M	-3	/M	-/N	-N	-2	2	/N	N	A	1	/A	-/A	-A	-1	1	/A	A	-A	-1	-/A	3	-/M	
$\chi_{12}^{(97)}$	-3	-3	-3	-2	-2	-2	-2	-2	-2	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	-3	-3	
$\chi_{12}^{(98)}$	-3	-3	-3	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	-3	-3	
$\chi_{12}^{(99)}$	3	3	3	-2	-2	-2	2	2	2	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1	-3	-3	
$\chi_{12}^{(100)}$	3	3	3	2	2	2	-2	-2	-2	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	-3	-3	
$\chi_{12}^{(101)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-2	-2	-2	-2	-2	-2	-6	-6
$\chi_{12}^{(102)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2	2	2	-2	-2	-2	-6	-6
$\chi_{12}^{(103)}$	/M	-3	M	-N	-/N	-2	-2	-N	-/N	-/A	-1	-A	-A	-/A	-1	1	A	/A	/A	1	A	-3	M	
$\chi_{12}^{(104)}$	M	-3	/M	-/N	-N	-2	-2	-/N	-N	-A	-1	-/A	-/A	-A	-1	1	/A	A	A	1	/A	-3	/M	
$\chi_{12}^{(105)}$	/M	-3	M	N	/N	2	2	N	/N	/A	1	A	A	/A	1	1	A	/A	/A	1	A	-3	M	
$\chi_{12}^{(106)}$	M	-3	/M	/N	N	2	2	/N	N	A	1	/A	/A	A	1	1	/A	A	A	1	/A	-3	/M	
$\chi_{12}^{(107)}$	-/M	3	-M	-N	-/N	-2	2	N	/N	/A	1	A	-A	-/A	-1	-1	-A	-/A	/A	1	A	-3	M	
$\chi_{12}^{(108)}$	-M	3	-/M	-/N	-N	-2	2	/N	N	A	1	/A	-/A	-A	-1	-1	-/A	-A	A	1	/A	-3	/M	
$\chi_{12}^{(109)}$	-/M	3	-M	N	/N	2	-2	-N	-/N	-/A	-1	-A	A	/A	1	-1	-A	-/A	/A	1	A	-3	M	
$\chi_{12}^{(110)}$	-M	3	-/M	/N	N	2	-2	-/N	-N	-A	-1	-/A	/A	A	1	-1	-/A	-A	A	1	/A	-3	/M	
$\chi_{12}^{(111)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-2	-N	-/N	-/N	-2	-N	-6	-B
$\chi_{12}^{(112)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-2	-/N	-N	-N	-2	-/N	-6	-/B
$\chi_{12}^{(113)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2	N	/N	-/N	-2	-N	-6	-B
$\chi_{12}^{(114)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2	/N	N	-N	-2	-/N	-6	-/B
$\chi_{12}^{(115)}$	-2	-2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	4	4
$\chi_{12}^{(116)}$	-2	-2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	4	4
$\chi_{12}^{(117)}$	2	2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	4	4
$\chi_{12}^{(118)}$	2	2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	4	4
$\chi_{12}^{(119)}$	-/N	-2	-N	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	4	/R
$\chi_{12}^{(120)}$	-N	-2	-/N	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	4	R
$\chi_{12}^{(121)}$	-/N	-2	-N	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	4	/R
$\chi_{12}^{(122)}$	-N	-2	-/N	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	4	R
$\chi_{12}^{(123)}$	/N	2	N	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	4	/R
$\chi_{12}^{(124)}$	N	2	/N	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	4	R
$\chi_{12}^{(125)}$	/N	2	N	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	4	/R
$\chi_{12}^{(126)}$	N	2	/N	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	4	R
$\chi_{12}^{(127)}$	2	2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-4	-4
$\chi_{12}^{(128)}$	-2	-2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-4	-4
$\chi_{12}^{(129)}$	/N	2	N	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-4	-/R
$\chi_{12}^{(130)}$	N	2	/N	-4	-R	
$\chi_{12}^{(131)}$	-/N	-2	-N	-4	-/R	
$\chi_{12}^{(132)}$	-N	-2	-/N	-4	-R	
$\chi_{12}^{(133)}$.	.	.	-3	-3	-3	-3	-3	-3	
$\chi_{12}^{(134)}$.	.	.	3	3	3	3	3	3	
$\chi_{12}^{(135)}$.	.	.	-3	-3	-3	3	3	3	

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$\chi_{12}^{(31)}$	3	3	3	3	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	-2	
$\chi_{12}^{(32)}$	3	3	3	3	3	3	-3	-3	-3	-3	-3	-3	-2	-2	-2	-2	-2	-2	1	
$\chi_{12}^{(33)}$	3	3	3	3	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	2	
$\chi_{12}^{(34)}$	.	.	.	.	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2	-1
$\chi_{12}^{(35)}$	3	-3	-3	-3	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	2	
$\chi_{12}^{(36)}$	.	.	.	.	3	3	3	-3	-3	-3	-3	-3	-3	3	3	3	-2	-2	-2	2	2	2	-1
$\chi_{12}^{(37)}$	3	-3	-3	-3	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1	-2	
$\chi_{12}^{(38)}$	.	.	.	.	3	3	3	-3	-3	-3	3	3	3	-3	-3	-3	2	2	2	-2	-2	-2	1
$\chi_{12}^{(39)}$	-/M	-/M	3	-M	-/A	-1	-A	-A	-/A	-1	-/A	-1	-A	-A	-/A	-1	1	A	/A	/A	1	A	-N	
$\chi_{12}^{(40)}$	-M	-M	3	-/M	-A	-1	-/A	-/A	-A	-1	-A	-1	-/A	-/A	-A	-1	1	/A	A	A	1	/A	-/N	
$\chi_{12}^{(41)}$	.	.	.	.	-/M	3	-M	-M	-/M	3	/M	-3	M	M	/M	-3	-2	-N	-/N	-/N	-2	-N	A
$\chi_{12}^{(42)}$	.	.	.	.	-M	3	-/M	-/M	-M	3	M	-3	/M	/M	M	-3	-2	-/N	-N	-N	-2	-/N	/A
$\chi_{12}^{(43)}$	-/M	-/M	3	-M	-/A	-1	-A	-A	-/A	-1	/A	1	A	A	/A	1	-1	-A	-/A	-/A	-1	-A	N	
$\chi_{12}^{(44)}$	-M	-M	3	-/M	-A	-1	-/A	-/A	-A	-1	A	1	/A	/A	A	1	-1	-/A	-A	-A	-1	-/A	/N	
$\chi_{12}^{(45)}$	.	.	.	.	-/M	3	-M	-M	-/M	3	-/M	3	-M	-M	-/M	3	2	N	/N	/N	2	N	-A
$\chi_{12}^{(46)}$	.	.	.	.	-M	3	-/M	-/M	-M	3	-M	3	-/M	-/M	-M	3	2	/N	N	N	2	/N	-/A
$\chi_{12}^{(47)}$	-/M	/M	-3	M	-/A	-1	-A	A	/A	1	-/A	-1	-A	A	/A	1	1	A	/A	-/A	-1	-A	N	
$\chi_{12}^{(48)}$	-M	M	-3	/M	-A	-1	-/A	/A	A	1	-A	-1	-/A	/A	A	1	1	/A	A	-A	-1	-/A	/N	
$\chi_{12}^{(49)}$	.	.	.	.	-/M	3	-M	M	/M	-3	/M	-3	M	-M	-/M	3	-2	-N	-/N	/N	2	N	-A
$\chi_{12}^{(50)}$	.	.	.	.	-M	3	-/M	/M	M	-3	M	-3	/M	-/M	-M	3	-2	-/N	-N	N	2	/N	-/A
$\chi_{12}^{(51)}$	-/M	/M	-3	M	-/A	-1	-A	A	/A	1	/A	1	A	-A	-/A	-1	-1	-A	-/A	/A	1	A	-N	
$\chi_{12}^{(52)}$	-M	M	-3	/M	-A	-1	-/A	/A	A	1	A	1	/A	-/A	-A	-1	-1	-/A	-A	A	1	/A	-/N	
$\chi_{12}^{(53)}$	.	.	.	.	-/M	3	-M	M	/M	-3	-/M	3	-M	M	/M	-3	2	N	/N	-/N	-2	-N	A
$\chi_{12}^{(54)}$	.	.	.	.	-M	3	-/M	/M	M	-3	-M	3	-/M	/M	M	-3	2	/N	N	-N	-2	-/N	/A
$\chi_{12}^{(55)}$	5	5	5	5	4	4	4	4	4	4	-2	-2	-2	-2	-2	-2	-1	-1	-1	-1	-1	-1		
$\chi_{12}^{(56)}$	5	5	5	5	4	4	4	4	4	4	2	2	2	2	2	2	1	1	1	1	1	1		
$\chi_{12}^{(57)}$	5	-5	-5	-5	4	4	4	-4	-4	-4	-2	-2	-2	2	2	2	-1	-1	-1	1	1	1		
$\chi_{12}^{(58)}$	5	-5	-5	-5	4	4	4	-4	-4	-4	2	2	2	-2	-2	-2	1	1	1	-1	-1	-1		
$\chi_{12}^{(59)}$	2	2	2	2	-4	-4	-4	-4	-4	-4	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(60)}$	2	-2	-2	-2	-4	-4	-4	4	4	4	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(61)}$	-U	-U	5	-/U	R	4	/R	/R	R	4	-/N	-2	-N	-N	-/N	-2	-1	-A	-/A	-/A	-1	-A	-A	
$\chi_{12}^{(62)}$	-/U	-/U	5	-U	/R	4	R	R	/R	4	-N	-2	-/N	-/N	-N	-2	-1	-/A	-A	-A	-1	-/A	-/A	
$\chi_{12}^{(63)}$	-U	-U	5	-/U	R	4	/R	/R	R	4	/N	2	N	N	/N	2	1	A	/A	/A	1	A	A	
$\chi_{12}^{(64)}$	-/U	-/U	5	-U	/R	4	R	R	/R	4	N	2	/N	/N	N	2	1	/A	A	A	1	/A	/A	
$\chi_{12}^{(65)}$	-U	U	-5	/U	R	4	/R	-/R	-R	-4	-/N	-2	-N	N	/N	2	-1	-A	-/A	/A	1	A	A	
$\chi_{12}^{(66)}$	-/U	/U	-5	U	/R	4	R	-R	-/R	-4	-N	-2	-/N	/N	N	2	-1	-/A	-A	A	1	/A	/A	
$\chi_{12}^{(67)}$	-U	U	-5	/U	R	4	/R	-/R	-R	-4	/N	2	N	-N	-/N	-2	1	A	/A	-/A	-1	-A	-A	
$\chi_{12}^{(68)}$	-/U	/U	-5	U	/R	4	R	-R	-/R	-4	N	2	/N	-/N	-N	-2	1	/A	A	-A	-1	-/A	-/A	
$\chi_{12}^{(69)}$	/N	/N	2	N	-R	-4	-/R	-/R	-R	-4	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(70)}$	N	N	2	/N	-/R	-4	-R	-R	-/R	-4	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(71)}$	/N	-/N	-2	-N	-R	-4	-/R	/R	R	4		
$\chi_{12}^{(72)}$	N	-N	-2	-/N	-/R	-4	-R	R	/R	4		
$\chi_{12}^{(73)}$	2	2	2	2	2	2	-1		
$\chi_{12}^{(74)}$	-2	-2	-2	-2	-2	-2	1		
$\chi_{12}^{(75)}$	2	2	2	-2	-2	-2	1		

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$\chi_{12}^{(76)}$	-2	-2	-2	2	2	2	-1
$\chi_{12}^{(77)}$	2	N	/N	/N	2	N	-A
$\chi_{12}^{(78)}$	2	/N	N	N	2	/N	-/A
$\chi_{12}^{(79)}$	-2	-N	-/N	-/N	-2	-N	A
$\chi_{12}^{(80)}$	-2	-/N	-N	-N	-2	-/N	/A
$\chi_{12}^{(81)}$	2	N	/N	-/N	-2	-N	A
$\chi_{12}^{(82)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2	/N	N	-N	-2	-/N	/A
$\chi_{12}^{(83)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-2	-N	-/N	/N	2	N	-A
$\chi_{12}^{(84)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-2	-/N	-N	N	2	/N	-/A
$\chi_{12}^{(85)}$	3	3	3	3	2	2	2	2	2	2	4	4	4	4	4	-1	-1	-1	-1	-1	-1	-1
$\chi_{12}^{(86)}$	3	3	3	3	2	2	2	2	2	2	-4	-4	-4	-4	-4	-4	1	1	1	1	1	1
$\chi_{12}^{(87)}$	3	-3	-3	-3	2	2	2	-2	-2	-2	4	4	4	-4	-4	-4	-1	-1	-1	1	1	1
$\chi_{12}^{(88)}$	3	-3	-3	-3	2	2	2	-2	-2	-2	-4	-4	-4	4	4	4	1	1	1	-1	-1	-1
$\chi_{12}^{(89)}$	-/M	-/M	3	-M	/N	2	N	N	/N	2	R	4	/R	/R	R	4	-1	-A	-/A	-/A	-1	-A
$\chi_{12}^{(90)}$	-M	-M	3	-/M	N	2	/N	/N	N	2	/R	4	R	R	/R	4	-1	-/A	-A	-A	-1	-/A
$\chi_{12}^{(91)}$	-/M	-/M	3	-M	/N	2	N	N	/N	2	-R	-4	-/R	-/R	-R	-4	1	A	/A	/A	1	A
$\chi_{12}^{(92)}$	-M	-M	3	-/M	N	2	/N	/N	N	2	-/R	-4	-R	-R	-/R	-4	1	/A	A	A	1	/A
$\chi_{12}^{(93)}$	-/M	/M	-3	M	/N	2	N	-N	-/N	-2	R	4	/R	-/R	-R	-4	-1	-A	-/A	/A	1	A
$\chi_{12}^{(94)}$	-M	M	-3	/M	N	2	/N	-/N	-N	-2	/R	4	R	-R	-/R	-4	-1	-/A	-A	A	1	/A
$\chi_{12}^{(95)}$	-/M	/M	-3	M	/N	2	N	-N	-/N	-2	-R	-4	-/R	/R	R	4	1	A	/A	-/A	-1	-A
$\chi_{12}^{(96)}$	-M	M	-3	/M	N	2	/N	-/N	-N	-2	-/R	-4	-R	R	/R	4	1	/A	A	-A	-1	-/A
$\chi_{12}^{(97)}$	-3	-3	-3	-3	4	4	4	4	4	4	2	2	2	2	2	2	-1	-1	-1	-1	-1	-1
$\chi_{12}^{(98)}$	-3	-3	-3	-3	4	4	4	4	4	4	-2	-2	-2	-2	-2	-2	1	1	1	1	1	1
$\chi_{12}^{(99)}$	-3	3	3	3	4	4	4	-4	-4	-4	2	2	2	-2	-2	-2	-1	-1	-1	1	1	1
$\chi_{12}^{(100)}$	-3	3	3	3	4	4	4	-4	-4	-4	-2	-2	-2	2	2	2	1	1	1	-1	-1	-1
$\chi_{12}^{(101)}$	-6	-6	-6	-6	4	4	4	4	4	4	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(102)}$	-6	6	6	6	4	4	4	-4	-4	-4	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(103)}$	/M	/M	-3	M	R	4	/R	/R	R	4	/N	2	N	N	/N	2	-1	-A	-/A	-/A	-1	-A
$\chi_{12}^{(104)}$	M	M	-3	/M	/R	4	R	R	/R	4	N	2	/N	/N	N	2	-1	-/A	-A	-A	-1	-/A
$\chi_{12}^{(105)}$	/M	/M	-3	M	R	4	/R	/R	R	4	-/N	-2	-N	-N	-/N	-2	1	A	/A	/A	1	A
$\chi_{12}^{(106)}$	M	M	-3	/M	/R	4	R	R	/R	4	-N	-2	-/N	-/N	-N	-2	1	/A	A	A	1	/A
$\chi_{12}^{(107)}$	/M	-/M	3	-M	R	4	/R	-/R	-R	-4	/N	2	N	-N	-/N	-2	-1	-A	-/A	/A	1	A
$\chi_{12}^{(108)}$	M	-M	3	-/M	/R	4	R	-R	-/R	-4	N	2	/N	-/N	-N	-2	-1	-/A	-A	A	1	/A
$\chi_{12}^{(109)}$	/M	-/M	3	-M	R	4	/R	-/R	-R	-4	-/N	-2	-N	N	/N	2	1	A	/A	-/A	-1	-A
$\chi_{12}^{(110)}$	M	-M	3	-/M	/R	4	R	-R	-/R	-4	-N	-2	-/N	/N	N	2	1	/A	A	-A	-1	-/A
$\chi_{12}^{(111)}$	-/B	-/B	-6	-B	R	4	/R	/R	R	4	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(112)}$	-B	-B	-6	-/B	/R	4	R	R	/R	4	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(113)}$	-/B	/B	6	B	R	4	/R	-/R	-R	-4	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(114)}$	-B	B	6	/B	/R	4	R	-R	-/R	-4	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(115)}$	4	4	4	4	.	.	.	.	.	.	.	.	.	.	.	2	2	2	2	2	2	2
$\chi_{12}^{(116)}$	4	4	4	4	.	.	.	.	.	.	.	.	.	.	.	-2	-2	-2	-2	-2	-2	-2
$\chi_{12}^{(117)}$	4	-4	-4	-4	2	2	2	-2	-2	-2	-2
$\chi_{12}^{(118)}$	4	-4	-4	-4	-2	-2	-2	2	2	2	2
$\chi_{12}^{(119)}$	R	R	4	/R	2	N	/N	/N	2	N	N
$\chi_{12}^{(120)}$	/R	/R	4	R	2	/N	N	N	2	/N	/N

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$\chi_{12}^{(121)}$	R	R	4	/R	-2	-N	-/N	-/N	-2	-N	-N
$\chi_{12}^{(122)}$	/R	/R	4	R	-2	-/N	-N	-N	-2	-/N	-/N
$\chi_{12}^{(123)}$	R	-R	-4	-/R	2	N	/N	-/N	-2	-N	-N
$\chi_{12}^{(124)}$	/R	-/R	-4	-R	2	/N	N	-N	-2	-/N	-/N
$\chi_{12}^{(125)}$	R	-R	-4	-/R	.	.	.	.	.	.	.	.	.	.	.	-2	-N	-/N	/N	2	N	N
$\chi_{12}^{(126)}$	/R	-/R	-4	-R	.	.	.	.	.	.	.	.	.	.	.	-2	-/N	-N	N	2	/N	/N
$\chi_{12}^{(127)}$	-4	-4	-4	-4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(128)}$	-4	4	4	4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(129)}$	-R	-R	-4	-/R	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(130)}$	-/R	-/R	-4	-R	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(131)}$	-R	R	4	/R	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(132)}$	-/R	/R	4	R	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(133)}$	.	.	.	.	-3	-3	-3	-3	-3	-3	3	3	3	3	3	.	.	.	.	.	.	.
$\chi_{12}^{(134)}$	.	.	.	.	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	.	.	.	.	.	.	.
$\chi_{12}^{(135)}$	.	.	.	.	-3	-3	-3	3	3	3	3	3	3	-3	-3	-3	.	.	.	.	.	.
$\chi_{12}^{(136)}$	.	.	.	.	-3	-3	-3	3	3	3	-3	-3	-3	3	3	3	.	.	.	.	.	.
$\chi_{12}^{(137)}$	.	.	.	.	/M	-3	M	M	/M	-3	-/M	3	-M	-M	-/M	3	.	.	.	.	.	.
$\chi_{12}^{(138)}$	.	.	.	.	M	-3	/M	/M	M	-3	-M	3	-/M	-/M	-M	3	.	.	.	.	.	.
$\chi_{12}^{(139)}$	.	.	.	.	/M	-3	M	M	/M	-3	/M	-3	M	M	/M	-3	.	.	.	.	.	.
$\chi_{12}^{(140)}$	.	.	.	.	M	-3	/M	/M	M	-3	M	-3	/M	/M	M	-3	.	.	.	.	.	.
$\chi_{12}^{(141)}$	.	.	.	.	/M	-3	M	-M	-/M	3	-/M	3	-M	M	/M	-3	.	.	.	.	.	.
$\chi_{12}^{(142)}$	.	.	.	.	M	-3	/M	-/M	-M	3	-M	3	-/M	/M	M	-3	.	.	.	.	.	.
$\chi_{12}^{(143)}$	.	.	.	.	/M	-3	M	-M	-/M	3	/M	-3	M	-M	-/M	3	.	.	.	.	.	.
$\chi_{12}^{(144)}$	.	.	.	.	M	-3	/M	-/M	-M	3	M	-3	/M	-/M	-M	3	.	.	.	.	.	.
$\chi_{12}^{(145)}$	.	.	.	.	-6	-6	-6	-6	-6	-6	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(146)}$	-6	-6	-6	6	6	6
$\chi_{12}^{(147)}$	-/B	-6	-B	-B	-/B	-6
$\chi_{12}^{(148)}$	-B	-6	-/B	-/B	-B	-6
$\chi_{12}^{(149)}$	-/B	-6	-B	B	/B	6
$\chi_{12}^{(150)}$	-B	-6	-/B	/B	B	6
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$\chi_{12}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{12}^{(2)}$	1	1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	-1	-1
$\chi_{12}^{(3)}$	-1	-1	1	1	1	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	-1	-1
$\chi_{12}^{(4)}$	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{12}^{(5)}$	/A	1	-1	-A	-/A	/A	1	A	-A	-/A	-1	A	/A	1	-1	-A	-/A	A	/A	1	-1	-A
$\chi_{12}^{(6)}$	A	1	-1	-/A	-A	A	1	/A	-/A	-A	-1	/A	A	1	-1	-/A	-A	/A	A	1	-1	-/A
$\chi_{12}^{(7)}$	-/A	-1	1	A	/A	/A	1	A	-A	-/A	-1	A	/A	1	-1	-A	-/A	A	/A	1	-1	-A
$\chi_{12}^{(8)}$	-A	-1	1	/A	A	A	1	/A	-/A	-A	-1	/A	A	1	-1	-/A	-A	/A	A	1	-1	-/A
$\chi_{12}^{(9)}$	-/A	-1	-1	-A	-/A	/A	1	A	A	/A	1	A	/A	1	1	A	/A	A	/A	1	1	A
$\chi_{12}^{(10)}$	-A	-1	-1	-/A	-A	A	1	/A	/A	A	1	/A	A	1	1	/A	A	/A	A	1	1	/A
$\chi_{12}^{(11)}$	/A	1	1	A	/A	/A	1	A	A	/A	1	A	/A	1	1	A	/A	A	/A	1	1	A
$\chi_{12}^{(12)}$	A	1	1	/A	A	A	1	/A	/A	A	1	/A	A	1	1	/A	A	/A	A	1	1	/A
$\chi_{12}^{(13)}$	2	2	2	2	2	1	1	1	1	1	1	-2	-2	-2	-2	-2	-2
$\chi_{12}^{(14)}$	-2	-2	-2	-2	-2	1	1	1	1	1	1	-2	-2	-2	-2	-2	-2
$\chi_{12}^{(15)}$	-2	-2	2	2	2	1	1	1	-1	-1	-1	-2	-2	-2	2	2	2

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$\chi_{12}^{(16)}$	2	2	-2	-2	-2	1	1	1	-1	-1	-1	-2	-2	-2	2	2	2
$\chi_{12}^{(17)}$	/N	2	2	N	/N	/A	1	A	A	/A	1	-N	-/N	-2	-2	-N	-/N
$\chi_{12}^{(18)}$	N	2	2	/N	N	A	1	/A	/A	A	1	-/N	-N	-2	-2	-/N	-N
$\chi_{12}^{(19)}$	-/N	-2	-2	-N	-/N	/A	1	A	A	/A	1	-N	-/N	-2	-2	-N	-/N	.	.	.	.	.	.
$\chi_{12}^{(20)}$	-N	-2	-2	-/N	-N	A	1	/A	/A	A	1	-/N	-N	-2	-2	-/N	-N	.	.	.	.	.	.
$\chi_{12}^{(21)}$	-/N	-2	2	N	/N	/A	1	A	-A	-/A	-1	-N	-/N	-2	2	N	/N	.	.	.	.	.	.
$\chi_{12}^{(22)}$	-N	-2	2	/N	N	A	1	/A	-/A	-A	-1	-/N	-N	-2	2	/N	N	.	.	.	.	.	.
$\chi_{12}^{(23)}$	/N	2	-2	-N	-/N	/A	1	A	-A	-/A	-1	-N	-/N	-2	2	N	/N	.	.	.	.	.	.
$\chi_{12}^{(24)}$	N	2	-2	-/N	-N	A	1	/A	-/A	-A	-1	-/N	-N	-2	2	/N	N	.	.	.	.	.	.
$\chi_{12}^{(25)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-2	-2	-2	-2	-2	-2
$\chi_{12}^{(26)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-2	-2	-2	2	2	2
$\chi_{12}^{(27)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-N	-/N	-2	-2	-N	-/N
$\chi_{12}^{(28)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-/N	-N	-2	-2	-/N	-N
$\chi_{12}^{(29)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-N	-/N	-2	2	N	/N
$\chi_{12}^{(30)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-/N	-N	-2	2	/N	N
$\chi_{12}^{(31)}$	-2	-2	-2	-2	-2	-1	-1	-1	-1	-1	-1	2	2	2	2	2	2	-1	-1	-1	-1	-1	-1
$\chi_{12}^{(32)}$	1	1	1	1	1	-2	-2	-2	-2	-2	-2	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{12}^{(33)}$	2	2	2	2	2	-1	-1	-1	-1	-1	-1	2	2	2	2	2	2	-1	-1	-1	-1	-1	-1
$\chi_{12}^{(34)}$	-1	-1	-1	-1	-1	-2	-2	-2	-2	-2	-2	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{12}^{(35)}$	2	2	-2	-2	-2	-1	-1	-1	1	1	1	2	2	2	-2	-2	-2	-1	-1	-1	1	1	1
$\chi_{12}^{(36)}$	-1	-1	1	1	1	-2	-2	-2	2	2	2	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1
$\chi_{12}^{(37)}$	-2	-2	2	2	2	-1	-1	-1	1	1	1	2	2	2	-2	-2	-2	-1	-1	-1	1	1	1
$\chi_{12}^{(38)}$	1	1	-1	-1	-1	-2	-2	-2	2	2	2	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1
$\chi_{12}^{(39)}$	-/N	-2	-2	-N	-/N	-/A	-1	-A	-A	-/A	-1	N	/N	2	2	N	/N	-A	-/A	-1	-1	-A	-/A
$\chi_{12}^{(40)}$	-N	-2	-2	-/N	-N	-A	-1	-/A	-/A	-A	-1	/N	N	2	2	/N	N	-/A	-A	-1	-1	-/A	-A
$\chi_{12}^{(41)}$	/A	1	1	A	/A	-/N	-2	-N	-N	-/N	-2	A	/A	1	1	A	/A	A	/A	1	1	A	/A
$\chi_{12}^{(42)}$	A	1	1	/A	A	-N	-2	-/N	-/N	-N	-2	/A	A	1	1	/A	A	/A	A	1	1	/A	A
$\chi_{12}^{(43)}$	/N	2	2	N	/N	-/A	-1	-A	-A	-/A	-1	N	/N	2	2	N	/N	-A	-/A	-1	-1	-A	-/A
$\chi_{12}^{(44)}$	N	2	2	/N	N	-A	-1	-/A	-/A	-A	-1	/N	N	2	2	/N	N	-/A	-A	-1	-1	-/A	-A
$\chi_{12}^{(45)}$	-/A	-1	-1	-A	-/A	-/N	-2	-N	-N	-/N	-2	A	/A	1	1	A	/A	A	/A	1	1	A	/A
$\chi_{12}^{(46)}$	-A	-1	-1	-/A	-A	-N	-2	-/N	-/N	-N	-2	/A	A	1	1	/A	A	/A	A	1	1	/A	A
$\chi_{12}^{(47)}$	/N	2	-2	-N	-/N	-/A	-1	-A	A	/A	1	N	/N	2	-2	-N	-/N	-A	-/A	-1	1	A	/A
$\chi_{12}^{(48)}$	N	2	-2	-/N	-N	-A	-1	-/A	/A	A	1	/N	N	2	-2	-/N	-N	-/A	-A	-1	1	/A	A
$\chi_{12}^{(49)}$	-/A	-1	1	A	/A	-/N	-2	-N	N	/N	2	A	/A	1	-1	-A	-/A	A	/A	1	-1	-A	-/A
$\chi_{12}^{(50)}$	-A	-1	1	/A	A	-N	-2	-/N	/N	N	2	/A	A	1	-1	-/A	-A	/A	A	1	-1	-/A	-A
$\chi_{12}^{(51)}$	-/N	-2	2	N	/N	-/A	-1	-A	A	/A	1	N	/N	2	-2	-N	-/N	-A	-/A	-1	1	A	/A
$\chi_{12}^{(52)}$	-N	-2	2	/N	N	-A	-1	-/A	/A	A	1	/N	N	2	-2	-/N	-N	-/A	-A	-1	1	/A	A
$\chi_{12}^{(53)}$	/A	1	-1	-A	-/A	-/N	-2	-N	N	/N	2	A	/A	1	-1	-A	-/A	A	/A	1	-1	-A	-/A
$\chi_{12}^{(54)}$	A	1	-1	-/A	-A	-N	-2	-/N	/N	N	2	/A	A	1	-1	-/A	-A	/A	A	1	-1	-/A	-A
$\chi_{12}^{(55)}$	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	1	1	1	.	.	.	.	.	.
$\chi_{12}^{(56)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	.	.	.	.	.	.
$\chi_{12}^{(57)}$	1	1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	.	.	.	.	.	.
$\chi_{12}^{(58)}$	-1	-1	1	1	1	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	.	.	.	.	.	.
$\chi_{12}^{(59)}$	.	.	.	.	.	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	.	.	.	.	.	.
$\chi_{12}^{(60)}$	.	.	.	.	.	-2	-2	-2	2	2	2	-2	-2	-2	2	2	2	.	.	.	.	.	.

	120										130												
$\chi_{12}^{(61)}$	-/A	-1	-1	-A	-/A	/A	1	A	A	/A	1	A	/A	1	1	A	/A	.	.	.	.	.	.
$\chi_{12}^{(62)}$	-A	-1	-1	-/A	-A	A	1	/A	/A	A	1	/A	A	1	1	/A	A	.	.	.	.	.	.
$\chi_{12}^{(63)}$	/A	1	1	A	/A	/A	1	A	A	/A	1	A	/A	1	1	A	/A	.	.	.	.	.	.
$\chi_{12}^{(64)}$	A	1	1	/A	A	A	1	/A	/A	A	1	/A	A	1	1	/A	A	.	.	.	.	.	.
$\chi_{12}^{(65)}$	/A	1	-1	-A	-/A	/A	1	A	-A	-/A	-1	A	/A	1	-1	-A	-/A	.	.	.	.	.	.
$\chi_{12}^{(66)}$	A	1	-1	-/A	-A	A	1	/A	-/A	-A	-1	/A	A	1	-1	-/A	-A	.	.	.	.	.	.
$\chi_{12}^{(67)}$	-/A	-1	1	A	/A	/A	1	A	-A	-/A	-1	A	/A	1	-1	-A	-/A	.	.	.	.	.	.
$\chi_{12}^{(68)}$	-A	-1	1	/A	A	A	1	/A	-/A	-A	-1	/A	A	1	-1	-/A	-A	.	.	.	.	.	.
$\chi_{12}^{(69)}$	.	.	.	.	.	-/N	-2	-N	-N	-/N	-2	-N	-/N	-2	-2	-N	-/N	.	.	.	.	.	.
$\chi_{12}^{(70)}$	.	.	.	.	.	-N	-2	-/N	-/N	-N	-2	-/N	-N	-2	-2	-/N	-N	.	.	.	.	.	.
$\chi_{12}^{(71)}$	.	.	.	.	.	-/N	-2	-N	N	/N	2	-N	-/N	-2	2	N	/N	.	.	.	.	.	.
$\chi_{12}^{(72)}$	.	.	.	.	.	-N	-2	-/N	/N	N	2	-/N	-N	-2	2	/N	N	.	.	.	.	.	.
$\chi_{12}^{(73)}$	-1	-1	-1	-1	-1	2	2	2	2	2	2	-1	-1	-1	-1	-1	-1	.	.	.	.	.	.
$\chi_{12}^{(74)}$	1	1	1	1	1	2	2	2	2	2	2	-1	-1	-1	-1	-1	-1	.	.	.	.	.	.
$\chi_{12}^{(75)}$	1	1	-1	-1	-1	2	2	2	-2	-2	-2	-1	-1	-1	1	1	1	.	.	.	.	.	.
$\chi_{12}^{(76)}$	-1	-1	1	1	1	2	2	2	-2	-2	-2	-1	-1	-1	1	1	1	.	.	.	.	.	.
$\chi_{12}^{(77)}$	-/A	-1	-1	-A	-/A	/N	2	N	N	/N	2	-A	-/A	-1	-1	-A	-/A	.	.	.	.	.	.
$\chi_{12}^{(78)}$	-A	-1	-1	-/A	-A	N	2	/N	/N	N	2	-/A	-A	-1	-1	-/A	-A	.	.	.	.	.	.
$\chi_{12}^{(79)}$	/A	1	1	A	/A	/N	2	N	N	/N	2	-A	-/A	-1	-1	-A	-/A	.	.	.	.	.	.
$\chi_{12}^{(80)}$	A	1	1	/A	A	N	2	/N	/N	N	2	-/A	-A	-1	-1	-/A	-A	.	.	.	.	.	.
$\chi_{12}^{(81)}$	/A	1	-1	-A	-/A	/N	2	N	-N	-/N	-2	-A	-/A	-1	1	A	/A	.	.	.	.	.	.
$\chi_{12}^{(82)}$	A	1	-1	-/A	-A	N	2	/N	-/N	-N	-2	-/A	-A	-1	1	/A	A	.	.	.	.	.	.
$\chi_{12}^{(83)}$	-/A	-1	1	A	/A	/N	2	N	-N	-/N	-2	-A	-/A	-1	1	A	/A	.	.	.	.	.	.
$\chi_{12}^{(84)}$	-A	-1	1	/A	A	N	2	/N	-/N	-N	-2	-/A	-A	-1	1	/A	A	.	.	.	.	.	.
$\chi_{12}^{(85)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	.	.	.	.	.	.
$\chi_{12}^{(86)}$	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	.	.	.	.	.	.
$\chi_{12}^{(87)}$	1	1	-1	-1	-1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	.	.	.	.	.	.
$\chi_{12}^{(88)}$	-1	-1	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	.	.	.	.	.	.
$\chi_{12}^{(89)}$	-/A	-1	-1	-A	-/A	-/A	-1	-A	-A	-/A	-1	-A	-/A	-1	-1	-A	-/A	.	.	.	.	.	.
$\chi_{12}^{(90)}$	-A	-1	-1	-/A	-A	-A	-1	-/A	-/A	-A	-1	-/A	-A	-1	-1	-/A	-A	.	.	.	.	.	.
$\chi_{12}^{(91)}$	/A	1	1	A	/A	-/A	-1	-A	-A	-/A	-1	-A	-/A	-1	-1	-A	-/A	.	.	.	.	.	.
$\chi_{12}^{(92)}$	A	1	1	/A	A	-A	-1	-/A	-/A	-A	-1	-/A	-A	-1	-1	-/A	-A	.	.	.	.	.	.
$\chi_{12}^{(93)}$	/A	1	-1	-A	-/A	-/A	-1	-A	A	/A	1	-A	-/A	-1	1	A	/A	.	.	.	.	.	.
$\chi_{12}^{(94)}$	A	1	-1	-/A	-A	-A	-1	-/A	/A	A	1	-/A	-A	-1	1	/A	A	.	.	.	.	.	.
$\chi_{12}^{(95)}$	-/A	-1	1	A	/A	-/A	-1	-A	A	/A	1	-A	-/A	-1	1	A	/A	.	.	.	.	.	.
$\chi_{12}^{(96)}$	-A	-1	1	/A	A	-A	-1	-/A	/A	A	1	-/A	-A	-1	1	/A	A	.	.	.	.	.	.
$\chi_{12}^{(97)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	.	.	.	.	.	.
$\chi_{12}^{(98)}$	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	.	.	.	.	.	.
$\chi_{12}^{(99)}$	1	1	-1	-1	-1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	.	.	.	.	.	.
$\chi_{12}^{(100)}$	-1	-1	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	.	.	.	.	.	.
$\chi_{12}^{(101)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(102)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(103)}$	-/A	-1	-1	-A	-/A	-/A	-1	-A	-A	-/A	-1	-A	-/A	-1	-1	-A	-/A	.	.	.	.	.	.
$\chi_{12}^{(104)}$	-A	-1	-1	-/A	-A	-A	-1	-/A	-/A	-A	-1	-/A	-A	-1	-1	-/A	-A	.	.	.	.	.	.
$\chi_{12}^{(105)}$	/A	1	1	A	/A	-/A	-1	-A	-A	-/A	-1	-A	-/A	-1	-1	-A	-/A	.	.	.	.	.	.

	120										130												
$\chi_{12}^{(106)}$	A	1	1	/A	A	-A	-1	-/A	-/A	-A	-1	-/A	-A	-1	-1	-/A	-A	.	.	.	.	.	.
$\chi_{12}^{(107)}$	/A	1	-1	-A	-/A	-/A	-1	-A	A	/A	1	-A	-/A	-1	1	A	/A	.	.	.	.	.	.
$\chi_{12}^{(108)}$	A	1	-1	-/A	-A	-A	-1	-/A	/A	A	1	-/A	-A	-1	1	/A	A	.	.	.	.	.	.
$\chi_{12}^{(109)}$	-/A	-1	1	A	/A	-/A	-1	-A	A	/A	1	-A	-/A	-1	1	A	/A	.	.	.	.	.	.
$\chi_{12}^{(110)}$	-A	-1	1	/A	A	-A	-1	-/A	/A	A	1	-/A	-A	-1	1	/A	A	.	.	.	.	.	.
$\chi_{12}^{(111)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(112)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(113)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(114)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(115)}$	2	2	2	2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(116)}$	-2	-2	-2	-2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(117)}$	-2	-2	2	2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(118)}$	2	2	-2	-2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(119)}$	/N	2	2	N	/N	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(120)}$	N	2	2	/N	N	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(121)}$	-/N	-2	-2	-N	-/N	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(122)}$	-N	-2	-2	-/N	-N	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(123)}$	-/N	-2	2	N	/N	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(124)}$	-N	-2	2	/N	N	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(125)}$	/N	2	-2	-N	-/N	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(126)}$	N	2	-2	-/N	-N	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(127)}$	.	.	.	.	.	2	2	2	2	2	2	2	2	2	2	2	2	.	.	.	.	.	.
$\chi_{12}^{(128)}$	.	.	.	.	.	2	2	2	-2	-2	-2	2	2	2	-2	-2	-2	.	.	.	.	.	.
$\chi_{12}^{(129)}$	.	.	.	.	.	/N	2	N	N	/N	2	N	/N	2	2	N	/N	.	.	.	.	.	.
$\chi_{12}^{(130)}$	.	.	.	.	.	N	2	/N	/N	N	2	/N	N	2	2	/N	N	.	.	.	.	.	.
$\chi_{12}^{(131)}$	.	.	.	.	.	/N	2	N	-N	-/N	-2	N	/N	2	-2	-N	-/N	.	.	.	.	.	.
$\chi_{12}^{(132)}$	.	.	.	.	.	N	2	/N	-/N	-N	-2	/N	N	2	-2	-/N	-N	.	.	.	.	.	.
$\chi_{12}^{(133)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	-1	-1	-1	-1	-1
$\chi_{12}^{(134)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	-1	-1	-1	-1	-1
$\chi_{12}^{(135)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	-1	-1	1	1	1
$\chi_{12}^{(136)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	-1	-1	1	1	1
$\chi_{12}^{(137)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-A	-/A	-1	-1	-A	-/A
$\chi_{12}^{(138)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-/A	-A	-1	-1	-/A	-A
$\chi_{12}^{(139)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-A	-/A	-1	-1	-A	-/A
$\chi_{12}^{(140)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-/A	-A	-1	-1	-/A	-A
$\chi_{12}^{(141)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-A	-/A	-1	1	A	/A
$\chi_{12}^{(142)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-/A	-A	-1	1	/A	A
$\chi_{12}^{(143)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-A	-/A	-1	1	A	/A
$\chi_{12}^{(144)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-/A	-A	-1	1	/A	A
$\chi_{12}^{(145)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2	2	2	2	2	2
$\chi_{12}^{(146)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2	2	2	-2	-2	-2
$\chi_{12}^{(147)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	N	/N	2	2	N	/N
$\chi_{12}^{(148)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	/N	N	2	2	/N	N
$\chi_{12}^{(149)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	N	/N	2	-2	-N	-/N
$\chi_{12}^{(150)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	/N	N	2	-2	-/N	-N

	140						150					
$\chi_{12}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{12}^{(2)}$	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1
$\chi_{12}^{(3)}$	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1
$\chi_{12}^{(4)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_{12}^{(5)}$	A	/A	1	-1	-A	-/A	-1	-A	-/A	/A	1	A
$\chi_{12}^{(6)}$	/A	A	1	-1	-/A	-A	-1	-/A	-A	A	1	/A
$\chi_{12}^{(7)}$	-A	-/A	-1	1	A	/A	1	A	/A	-/A	-1	-A
$\chi_{12}^{(8)}$	-/A	-A	-1	1	/A	A	1	/A	A	-A	-1	-/A
$\chi_{12}^{(9)}$	-A	-/A	-1	-1	-A	-/A	-1	-A	-/A	-/A	-1	-A
$\chi_{12}^{(10)}$	-/A	-A	-1	-1	-/A	-A	-1	-/A	-A	-A	-1	-/A
$\chi_{12}^{(11)}$	A	/A	1	1	A	/A	1	A	/A	/A	1	A
$\chi_{12}^{(12)}$	/A	A	1	1	/A	A	1	/A	A	A	1	/A
$\chi_{12}^{(13)}$	-2	-2	-2	-2	-2	-2	.	.	.	.	.	.
$\chi_{12}^{(14)}$	2	2	2	2	2	2	.	.	.	.	.	.
$\chi_{12}^{(15)}$	2	2	2	-2	-2	-2	.	.	.	.	.	.
$\chi_{12}^{(16)}$	-2	-2	-2	2	2	2	.	.	.	.	.	.
$\chi_{12}^{(17)}$	-N	-/N	-2	-2	-N	-/N	.	.	.	.	.	.
$\chi_{12}^{(18)}$	-/N	-N	-2	-2	-/N	-N	.	.	.	.	.	.
$\chi_{12}^{(19)}$	N	/N	2	2	N	/N	.	.	.	.	.	.
$\chi_{12}^{(20)}$	/N	N	2	2	/N	N	.	.	.	.	.	.
$\chi_{12}^{(21)}$	N	/N	2	-2	-N	-/N	.	.	.	.	.	.
$\chi_{12}^{(22)}$	/N	N	2	-2	-/N	-N	.	.	.	.	.	.
$\chi_{12}^{(23)}$	-N	-/N	-2	2	N	/N	.	.	.	.	.	.
$\chi_{12}^{(24)}$	-/N	-N	-2	2	/N	N	.	.	.	.	.	.
$\chi_{12}^{(25)}$	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(26)}$	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(27)}$	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(28)}$	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(29)}$	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(30)}$	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(31)}$	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1
$\chi_{12}^{(32)}$	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{12}^{(33)}$	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1
$\chi_{12}^{(34)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_{12}^{(35)}$	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1
$\chi_{12}^{(36)}$	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1
$\chi_{12}^{(37)}$	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1
$\chi_{12}^{(38)}$	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1
$\chi_{12}^{(39)}$	-A	-/A	-1	-1	-A	-/A	1	A	/A	/A	1	A
$\chi_{12}^{(40)}$	-/A	-A	-1	-1	-/A	-A	1	/A	A	A	1	/A
$\chi_{12}^{(41)}$	A	/A	1	1	A	/A	1	A	/A	/A	1	A
$\chi_{12}^{(42)}$	/A	A	1	1	/A	A	1	/A	A	A	1	/A
$\chi_{12}^{(43)}$	A	/A	1	1	A	/A	-1	-A	-/A	-/A	-1	-A
$\chi_{12}^{(44)}$	/A	A	1	1	/A	A	-1	-/A	-A	-A	-1	-/A
$\chi_{12}^{(45)}$	-A	-/A	-1	-1	-A	-/A	-1	-A	-/A	-/A	-1	-A

	140						150					
$\chi_{12}^{(91)}$	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(92)}$	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(93)}$	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(94)}$	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(95)}$	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(96)}$	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(97)}$	2	2	2	2	2	2	.	.	.	.	.	.
$\chi_{12}^{(98)}$	-2	-2	-2	-2	-2	-2	.	.	.	.	.	.
$\chi_{12}^{(99)}$	-2	-2	-2	2	2	2	.	.	.	.	.	.
$\chi_{12}^{(100)}$	2	2	2	-2	-2	-2	.	.	.	.	.	.
$\chi_{12}^{(101)}$	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(102)}$	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(103)}$	N	/N	2	2	N	/N	.	.	.	.	.	.
$\chi_{12}^{(104)}$	/N	N	2	2	/N	N	.	.	.	.	.	.
$\chi_{12}^{(105)}$	-N	-/N	-2	-2	-N	-/N	.	.	.	.	.	.
$\chi_{12}^{(106)}$	-/N	-N	-2	-2	-/N	-N	.	.	.	.	.	.
$\chi_{12}^{(107)}$	-N	-/N	-2	2	N	/N	.	.	.	.	.	.
$\chi_{12}^{(108)}$	-/N	-N	-2	2	/N	N	.	.	.	.	.	.
$\chi_{12}^{(109)}$	N	/N	2	-2	-N	-/N	.	.	.	.	.	.
$\chi_{12}^{(110)}$	/N	N	2	-2	-/N	-N	.	.	.	.	.	.
$\chi_{12}^{(111)}$	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(112)}$	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(113)}$	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(114)}$	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(115)}$	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(116)}$	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(117)}$	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(118)}$	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(119)}$	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(120)}$	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(121)}$	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(122)}$	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(123)}$	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(124)}$	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(125)}$	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(126)}$	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(127)}$	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(128)}$	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(129)}$	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(130)}$	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(131)}$	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(132)}$	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(133)}$	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1
$\chi_{12}^{(134)}$	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1
$\chi_{12}^{(135)}$	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1

	140											150										
$\chi_{12}^{(136)}$	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1										
$\chi_{12}^{(137)}$	-A	-/A	-1	-1	-A	-/A	1	A	/A	/A	1	A										
$\chi_{12}^{(138)}$	-/A	-A	-1	-1	-/A	-A	1	/A	A	A	1	/A										
$\chi_{12}^{(139)}$	A	/A	1	1	A	/A	-1	-A	-/A	-/A	-1	-A										
$\chi_{12}^{(140)}$	/A	A	1	1	/A	A	-1	-/A	-A	-A	-1	-/A										
$\chi_{12}^{(141)}$	A	/A	1	-1	-A	-/A	1	A	/A	-/A	-1	-A										
$\chi_{12}^{(142)}$	/A	A	1	-1	-/A	-A	1	/A	A	-A	-1	-/A										
$\chi_{12}^{(143)}$	-A	-/A	-1	1	A	/A	-1	-A	-/A	/A	1	A										
$\chi_{12}^{(144)}$	-/A	-A	-1	1	/A	A	-1	-/A	-A	A	1	/A										
$\chi_{12}^{(145)}$	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(146)}$	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(147)}$	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(148)}$	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(149)}$	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{12}^{(150)}$	.	.	.	.	.	.	.	.	.	.	.	.

where $A = E(3)^2 = (-1-ER(-3))/2 = -1-b3$, $B = 6^*E(3)^2 = -3-3^*ER(-3) = -3-3i3$, $C = 10^*E(3)^2 = -5-5^*ER(-3) = -5-5i3$, $D = 15^*E(3)^2 = (-15-15^*ER(-3))/2 = -15-15b3$, $E = 20^*E(3)^2 = -10-10^*ER(-3) = -10-10i3$, $F = 24^*E(3)^2 = -12-12^*ER(-3) = -12-12i3$, $G = 30^*E(3)^2 = -15-15^*ER(-3) = -15-15i3$, $H = 60^*E(3)^2 = -30-30^*ER(-3) = -30-30i3$, $I = 64^*E(3)^2 = -32-32^*ER(-3) = -32-32i3$, $J = 80^*E(3)^2 = -40-40^*ER(-3) = -40-40i3$, $K = 81^*E(3)^2 = (-81-81^*ER(-3))/2 = -81-81b3$, $L = 90^*E(3)^2 = -45-45^*ER(-3) = -45-45i3$, $M = -3^*E(3)^2 = (3+3^*ER(-3))/2 = 3+3b3$, $N = 2^*E(3)^2 = -1-ER(-3) = -1-i3$, $O = -7^*E(3)^2 = (7+7^*ER(-3))/2 = 7+7b3$, $P = -8^*E(3)^2 = 4+4^*ER(-3) = 4+4i3$, $Q = 9^*E(3)^2 = (-9-9^*ER(-3))/2 = -9-9b3$, $R = 4^*E(3) = -2+2^*ER(-3) = 4b3$, $S = 12^*E(3) = -6+6^*ER(-3) = 12b3$, $T = -16^*E(3) = 8-8^*ER(-3) = 8-8i3$, $U = -5^*E(3) = (5-5^*ER(-3))/2 = -5b3$.

The generators of $G^{s_{13}}$ are:

$$\begin{pmatrix} 0 & 0 & 2 & -1 & 0 & -1 & 0 & 1 \\ 0 & 1 & 3 & -2 & 0 & -1 & 0 & 0 \\ 0 & 0 & 4 & -2 & 0 & -1 & -1 & 1 \\ 1 & 1 & 5 & -3 & 0 & -2 & -1 & 1 \\ 1 & 1 & 4 & -3 & 0 & -1 & -1 & 1 \\ 1 & 1 & 3 & -3 & 1 & -1 & -1 & 1 \\ 1 & 0 & 2 & -2 & 1 & -1 & 0 & 0 \\ 1 & 0 & 1 & -1 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 1 & 0 & -1 & 1 & 0 & -1 & 1 & 0 \\ 1 & -1 & 0 & 1 & 0 & -1 & 1 & 0 \\ 1 & -1 & -1 & 2 & 0 & -1 & 1 & 0 \\ 1 & -1 & -1 & 1 & 1 & -1 & 1 & 0 \\ 1 & -1 & -1 & 1 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & -1 & 1 & 0 & -1 & 1 & -1 \\ 0 & 1 & -1 & 1 & 0 & -1 & 1 & -1 \\ 0 & 0 & -1 & 2 & 0 & -2 & 2 & -2 \\ 0 & 0 & -2 & 3 & 0 & -2 & 2 & -2 \\ 0 & 0 & -2 & 2 & 1 & -2 & 2 & -2 \\ 0 & 0 & -2 & 2 & 0 & -1 & 2 & -2 \\ 0 & 0 & -1 & 1 & 0 & -1 & 2 & -1 \\ 0 & 0 & -1 & 1 & 0 & -1 & 1 & 0 \end{pmatrix},$$

$$\begin{pmatrix} 0 & 0 & 0 & 0 & -1 & 0 & 2 & 0 \\ 0 & 1 & 0 & 0 & -2 & 0 & 3 & -1 \\ 0 & 0 & 0 & 0 & -2 & 0 & 4 & -1 \\ 0 & 1 & 0 & 0 & -4 & 1 & 5 & -1 \\ 0 & 0 & 0 & 1 & -4 & 1 & 4 & -1 \\ 0 & 0 & 0 & 1 & -3 & 0 & 3 & 0 \\ 0 & 0 & 1 & 0 & -2 & 0 & 2 & 0 \\ 1 & 0 & 0 & 0 & -1 & 0 & 1 & 0 \end{pmatrix}.$$

The representatives of conjugacy classes of $G^{s_{13}}$ are:

[illegible]

The character table of $G^{s_{13}}$:

	10										20									
$\chi_{13}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{13}^{(2)}$	1	-1	-1	1	1	-1	1	-1	-1	1	-1	1	-1	-1	1	1	-1	-1	1	-1
$\chi_{13}^{(3)}$	1	-1	1	-1	1	1	-1	1	-1	1	1	1	-1	1	-1	1	1	-1	1	-1
$\chi_{13}^{(4)}$	1	-1	-1	1	1	-1	-1	1	1	-1	1	-1	1	1	-1	1	-1	-1	1	-1
$\chi_{13}^{(5)}$	1	-1	1	-1	1	1	1	-1	1	-1	-1	1	-1	1	-1	1	-1	1	-1	-1
$\chi_{13}^{(6)}$	1	1	-1	-1	1	-1	1	1	-1	-1	1	-1	1	1	-1	-1	1	1	-1	1
$\chi_{13}^{(7)}$	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	-1	-1
$\chi_{13}^{(8)}$	1	1	-1	-1	1	-1	-1	-1	1	1	-1	1	-1	1	1	1	-1	-1	-1	1
$\chi_{13}^{(9)}$	1	A	A	-A	-A	A	1	-1	-1	1	-1	1	-A	/A	/A	-B	B	B	-B	/A
$\chi_{13}^{(10)}$	1	B	B	-B	-B	B	1	-1	-1	1	-1	1	-B	/B	/B	-B	-A	/A	/A	-A
$\chi_{13}^{(11)}$	1	/B	/B	-B	-B	/B	1	-1	-1	1	-1	1	-B	B	B	-B	-A	A	A	-A
$\chi_{13}^{(12)}$	1	/A	/A	-A	-A	/A	1	-1	-1	1	-1	1	-A	A	A	-A	-B	/B	/B	-B
$\chi_{13}^{(13)}$	1	A	-A	A	-A	-A	-1	1	-1	1	1	1	/A	-A	/A	-A	-B	B	-B	B
$\chi_{13}^{(14)}$	1	B	-B	B	-B	-B	-1	1	-1	1	1	1	/B	-B	/B	-B	-A	/A	-A	/A
$\chi_{13}^{(15)}$	1	/B	-B	/B	-B	-B	-1	1	-1	1	1	1	B	-B	B	-B	-A	A	-A	A
$\chi_{13}^{(16)}$	1	/A	-A	/A	-A	-A	-1	1	-1	1	1	1	A	-A	A	-A	-B	/B	-B	/B
$\chi_{13}^{(17)}$	1	A	A	-A	-A	A	-1	1	1	-1	1	-1	/A	-A	-A	/A	-B	B	B	-B
$\chi_{13}^{(18)}$	1	B	B	-B	-B	B	-1	1	1	-1	1	-1	/B	-B	-B	/B	-A	/A	/A	-A
$\chi_{13}^{(19)}$	1	/B	/B	-B	-B	/B	-1	1	1	-1	1	-1	B	-B	-B	B	-A	A	A	-A
$\chi_{13}^{(20)}$	1	/A	/A	-A	-A	/A	-1	1	1	-1	1	-1	A	-A	-A	A	-B	/B	/B	-B
$\chi_{13}^{(21)}$	1	A	-A	A	-A	-A	1	-1	1	-1	-1	-1	-A	/A	-A	/A	-B	B	-B	B
$\chi_{13}^{(22)}$	1	B	-B	B	-B	-B	1	-1	1	-1	-1	-1	-B	/B	-B	/B	-A	/A	-A	/A
$\chi_{13}^{(23)}$	1	/B	-B	/B	-B	-B	1	-1	1	-1	-1	-1	-B	B	-B	B	-A	A	-A	A
$\chi_{13}^{(24)}$	1	/A	-A	/A	-A	-A	1	-1	1	-1	-1	-1	-A	A	-A	A	-B	/B	-B	/B
$\chi_{13}^{(25)}$	1	-A	A	A	-A	A	1	1	-1	-1	1	-1	-A	-A	/A	/A	-B	-B	B	B
$\chi_{13}^{(26)}$	1	-B	B	B	-B	B	1	1	-1	-1	1	-1	-B	-B	/B	/B	-A	-A	/A	/A
$\chi_{13}^{(27)}$	1	-B	/B	/B	-B	/B	1	1	-1	-1	1	-1	-B	-B	B	B	-A	-A	A	A
$\chi_{13}^{(28)}$	1	-A	/A	/A	-A	/A	1	1	-1	-1	1	-1	-A	-A	A	A	-B	-B	/B	/B
$\chi_{13}^{(29)}$	1	-A	-A	-A	-A	-A	-1	-1	-1	-1	-1	-1	/A	/A	/A	/A	-B	-B	-B	-B
$\chi_{13}^{(30)}$	1	-B	-B	-B	-B	-B	-1	-1	-1	-1	-1	-1	/B	/B	/B	/B	-A	-A	-A	-A
$\chi_{13}^{(31)}$	1	-B	-B	-B	-B	-B	-1	-1	-1	-1	-1	-1	B	B	B	B	-A	-A	-A	-A
$\chi_{13}^{(32)}$	1	-A	-A	-A	-A	-A	-1	-1	-1	-1	-1	-1	A	A	A	A	-B	-B	-B	-B
$\chi_{13}^{(33)}$	1	-A	A	A	-A	A	-1	-1	1	1	-1	1	/A	/A	-A	-A	-B	-B	B	B
$\chi_{13}^{(34)}$	1	-B	B	B	-B	B	-1	-1	1	1	-1	1	/B	/B	-B	-B	-A	-A	/A	/A
$\chi_{13}^{(35)}$	1	-B	/B	/B	-B	/B	-1	-1	1	1	-1	1	B	B	-B	-B	-A	-A	A	A
$\chi_{13}^{(36)}$	1	-A	/A	/A	-A	/A	-1	-1	1	1	-1	1	A	A	-A	-A	-B	-B	/B	/B
$\chi_{13}^{(37)}$	1	-A	-A	-A	-A	-A	1	1	1	1	1	1	-A	-A	-A	-A	-B	-B	-B	-B
$\chi_{13}^{(38)}$	1	-B	-B	-B	-B	-B	1	1	1	1	1	1	-B	-B	-B	-B	-A	-A	-A	-A
$\chi_{13}^{(39)}$	1	-B	-B	-B	-B	-B	1	1	1	1	1	1	-B	-B	-B	-B	-A	-A	-A	-A
$\chi_{13}^{(40)}$	1	-A	-A	-A	-A	-A	1	1	1	1	1	1	-A	-A	-A	-A	-B	-B	-B	-B
$\chi_{13}^{(41)}$	2	.	1	.	2	-2	.	2	.	-2	-1	1	.	2	.	-2	-1	.	1	.
$\chi_{13}^{(42)}$	2	.	-1	.	2	2	.	-2	.	-2	1	1	.	-2	.	-2	-1	.	-1	.
$\chi_{13}^{(43)}$	2	.	-1	.	2	2	.	2	.	2	-1	-1	.	2	.	2	-1	.	-1	.
$\chi_{13}^{(44)}$	2	.	1	.	2	-2	.	-2	.	2	1	-1	.	-2	.	2	-1	.	1	.
$\chi_{13}^{(45)}$	2	.	-A	.	C	-C	.	2	.	-2	-1	1	.	/C	.	-/C	B	.	-B	.

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$\chi_{13}^{(46)}$	2	.	-B	.	D	-D	.	2	.	-2	-1	1	.	/D	.	-/D	/A	.	-/A	.	/B	-/B	A	.		
$\chi_{13}^{(47)}$	2	.	-/B	.	/D	-/D	.	2	.	-2	-1	1	.	D	.	-D	A	.	-A	.	B	-B	/A	.		
$\chi_{13}^{(48)}$	2	.	-/A	.	/C	-/C	.	2	.	-2	-1	1	.	C	.	-C	/B	.	-/B	.	A	-A	B	.		
$\chi_{13}^{(49)}$	2	.	A	.	C	C	.	-2	.	-2	1	1	.	-/C	.	-/C	B	.	B	.	-/A	-/A	/B	.		
$\chi_{13}^{(50)}$	2	.	B	.	D	D	.	-2	.	-2	1	1	.	-/D	.	-/D	/A	.	/A	.	-/B	-/B	A	.		
$\chi_{13}^{(51)}$	2	.	/B	.	/D	/D	.	-2	.	-2	1	1	.	-D	.	-D	A	.	A	.	-B	-B	/A	.		
$\chi_{13}^{(52)}$	2	.	/A	.	/C	/C	.	-2	.	-2	1	1	.	-C	.	-C	/B	.	/B	.	-A	-A	B	.		
$\chi_{13}^{(53)}$	2	.	A	.	C	C	.	2	.	2	-1	-1	.	/C	.	/C	B	.	B	.	/A	/A	/B	.		
$\chi_{13}^{(54)}$	2	.	B	.	D	D	.	2	.	2	-1	-1	.	/D	.	/D	/A	.	/A	.	/B	/B	A	.		
$\chi_{13}^{(55)}$	2	.	/B	.	/D	/D	.	2	.	2	-1	-1	.	D	.	D	A	.	A	.	B	B	/A	.		
$\chi_{13}^{(56)}$	2	.	/A	.	/C	/C	.	2	.	2	-1	-1	.	C	.	C	/B	.	/B	.	A	A	B	.		
$\chi_{13}^{(57)}$	2	.	-A	.	C	-C	.	-2	.	2	1	-1	.	-/C	.	/C	B	.	-B	.	-/A	/A	/B	.		
$\chi_{13}^{(58)}$	2	.	-B	.	D	-D	.	-2	.	2	1	-1	.	-/D	.	/D	/A	.	-/A	.	-/B	/B	A	.		
$\chi_{13}^{(59)}$	2	.	-/B	.	/D	-/D	.	-2	.	2	1	-1	.	-D	.	D	A	.	-A	.	-B	B	/A	.		
$\chi_{13}^{(60)}$	2	.	-/A	.	/C	-/C	.	-2	.	2	1	-1	.	-C	.	C	/B	.	-/B	.	-A	A	B	.		
			30												40											
$\chi_{13}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
$\chi_{13}^{(2)}$	-1	1	1	-1	-1	1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	1			
$\chi_{13}^{(3)}$	1	-1	-1	1	-1	1	1	1	-1	1	-1	1	1	-1	1	-1	1	1	1	1	1	1	1			
$\chi_{13}^{(4)}$	-1	1	-1	1	1	-1	1	-1	-1	1	1	-1	1	-1	-1	1	1	-1	1	-1	1	-1	1			
$\chi_{13}^{(5)}$	1	-1	1	-1	1	-1	-1	-1	1	-1	1	-1	1	-1	1	-1	1	1	-1	-1	1	1	1			
$\chi_{13}^{(6)}$	-1	-1	1	1	-1	-1	1	-1	1	1	-1	-1	1	1	-1	-1	1	-1	1	-1	1	-1	1			
$\chi_{13}^{(7)}$	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	-1	-1	1	1	1			
$\chi_{13}^{(8)}$	-1	-1	-1	-1	1	1	-1	1	-1	-1	1	1	1	1	-1	-1	1	-1	-1	1	1	-1	1			
$\chi_{13}^{(9)}$	/B	-/B	-/B	/B	/B	-/B	/B	-/B	-B	B	B	-B	-/A	/A	/A	-/A	-B	B	B	-B	-/B	/B	1			
$\chi_{13}^{(10)}$	A	-A	-A	A	A	-A	A	-A	-/A	/A	/A	-/A	-/B	/B	/B	-/B	-/A	/A	/A	-/A	-A	A	1			
$\chi_{13}^{(11)}$	/A	-/A	-/A	/A	/A	-/A	/A	-/A	-A	A	A	-A	-B	B	B	-B	-A	A	A	-A	-/A	/A	1			
$\chi_{13}^{(12)}$	B	-B	-B	B	B	-B	B	-B	-/B	/B	/B	-/B	-A	A	A	-A	-/B	/B	/B	-/B	-B	B	1			
$\chi_{13}^{(13)}$	-/B	/B	/B	-/B	/B	-/B	-/B	-/B	B	-B	B	-B	-/A	/A	-/A	/A	-B	-B	-B	-B	-/B	-/B	1			
$\chi_{13}^{(14)}$	-A	A	A	-A	A	-A	-A	-A	/A	-/A	/A	-/A	-/B	/B	-/B	/B	-/A	-/A	-/A	-/A	-A	-A	1			
$\chi_{13}^{(15)}$	-/A	/A	/A	-/A	/A	-/A	-/A	-/A	A	-A	A	-A	-B	B	-B	B	-A	-A	-A	-A	-/A	-/A	1			
$\chi_{13}^{(16)}$	-B	B	B	-B	B	-B	-B	-B	/B	-/B	/B	-/B	-A	A	-A	A	-/B	-/B	-/B	-/B	-B	-B	1			
$\chi_{13}^{(17)}$	/B	-/B	/B	-/B	-/B	/B	-/B	/B	B	-B	-B	B	-/A	/A	/A	-/A	-B	B	-B	B	-/B	/B	1			
$\chi_{13}^{(18)}$	A	-A	A	-A	-A	A	-A	A	/A	-/A	-/A	/A	-/B	/B	/B	-/B	-/A	/A	-/A	/A	-A	A	1			
$\chi_{13}^{(19)}$	/A	-/A	/A	-/A	-/A	/A	-/A	/A	A	-A	-A	A	-B	B	B	-B	-A	A	-A	A	-/A	/A	1			
$\chi_{13}^{(20)}$	B	-B	B	-B	-B	B	-B	B	/B	-/B	-/B	/B	-A	A	A	-A	-/B	/B	-/B	/B	-B	B	1			
$\chi_{13}^{(21)}$	-/B	/B	-/B	/B	-/B	/B	/B	/B	-B	B	-B	B	-/A	/A	-/A	/A	-B	-B	B	B	-/B	-/B	1			
$\chi_{13}^{(22)}$	-A	A	-A	A	-A	A	A	A	-/A	/A	-/A	/A	-/B	/B	-/B	/B	-/A	-/A	/A	/A	-A	-A	1			
$\chi_{13}^{(23)}$	-/A	/A	-/A	/A	-/A	/A	/A	/A	-A	A	-A	A	-B	B	-B	B	-A	-A	A	A	-/A	-/A	1			
$\chi_{13}^{(24)}$	-B	B	-B	B	-B	B	B	B	-/B	/B	-/B	/B	-A	A	-A	A	-/B	-/B	/B	/B	-B	-B	1			
$\chi_{13}^{(25)}$	/B	/B	-/B	-/B	/B	/B	-/B	/B	-B	-B	B	B	-/A	-/A	/A	/A	-B	B	-B	B	-/B	/B	1			
$\chi_{13}^{(26)}$	A	A	-A	-A	A	A	-A	A	-/A	-/A	/A	/A	-/B	-/B	/B	/B	-/A	/A	-/A	/A	-A	A	1			
$\chi_{13}^{(27)}$	/A	/A	-/A	-/A	/A	/A	-/A	/A	-A	-A	A	A	-B	-B	B	B	-A	A	-A	A	-/A	/A	1			
$\chi_{13}^{(28)}$	B	B	-B	-B	B	B	-B	B	-/B	-/B	/B	/B	-A	-A	A	A	-/B	/B	-/B	/B	-B	B	1			
$\chi_{13}^{(29)}$	-/B	-/B	/B	/B	/B	/B	/B	/B	B	B	B	B	-/A	-/A	-/A	-/A	-B	-B	B	B	-/B	-/B	1			
$\chi_{13}^{(30)}$	-A	-A	A	A	A	A	A	A	/A	/A	/A	/A	-/B	-/B	-/B	-/B	-/A	-/A	/A	/A	-A	-A	1			

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$\chi_{13}^{(31)}$	-/A	-/A	/A	/A	/A	/A	/A	/A	A	A	A	A	-B	-B	-B	-B	-A	-A	A	A	-/A	-/A	1
$\chi_{13}^{(32)}$	-B	-B	B	B	B	B	B	B	/B	/B	/B	/B	-A	-A	-A	-A	-/B	-/B	/B	/B	-B	-B	1
$\chi_{13}^{(33)}$	/B	/B	/B	/B	-/B	-/B	/B	-/B	B	B	-B	-B	-/A	-/A	/A	/A	-B	B	B	-B	-/B	/B	1
$\chi_{13}^{(34)}$	A	A	A	A	-A	-A	A	-A	/A	/A	-/A	-/A	-/B	-/B	/B	/B	-/A	/A	/A	-/A	-A	A	1
$\chi_{13}^{(35)}$	/A	/A	/A	/A	-/A	-/A	/A	-/A	A	A	-A	-A	-B	-B	B	B	-A	A	A	-A	-/A	/A	1
$\chi_{13}^{(36)}$	B	B	B	B	-B	-B	B	-B	/B	/B	-/B	-/B	-A	-A	A	A	-/B	/B	/B	-/B	-B	B	1
$\chi_{13}^{(37)}$	-/B	-/B	-/B	-/B	-/B	-/B	-/B	-/B	-B	-B	-B	-B	-/A	-/A	-/A	-/A	-B	-B	-B	-B	-/B	-/B	1
$\chi_{13}^{(38)}$	-A	-A	-A	-A	-A	-A	-A	-A	-/A	-/A	-/A	-/A	-/B	-/B	-/B	-/B	-/A	-/A	-/A	-/A	-A	-A	1
$\chi_{13}^{(39)}$	-/A	-/A	-/A	-/A	-/A	-/A	-/A	-/A	-A	-A	-A	-A	-B	-B	-B	-B	-A	-A	-A	-A	-/A	-/A	1
$\chi_{13}^{(40)}$	-B	-B	-B	-B	-B	-B	-B	-B	-/B	-/B	-/B	-/B	-A	-A	-A	-A	-/B	-/B	-/B	-/B	-B	-B	1
$\chi_{13}^{(41)}$	1	.	.	2	.	-2	-1	1	.	2	.	-2	-1	.	1	.	2	-2	-1	1	2	-2	-1
$\chi_{13}^{(42)}$	-1	.	.	-2	.	-2	1	1	.	-2	.	-2	-1	.	-1	.	2	2	1	1	2	2	-1
$\chi_{13}^{(43)}$	-1	.	.	2	.	2	-1	-1	.	2	.	2	-1	.	-1	.	2	2	-1	-1	2	2	-1
$\chi_{13}^{(44)}$	1	.	.	-2	.	2	1	-1	.	-2	.	2	-1	.	1	.	2	-2	1	-1	2	-2	-1
$\chi_{13}^{(45)}$	-/B	.	.	/D	.	-/D	/B	-/B	.	D	.	-D	/A	.	-/A	.	D	-D	B	-B	/D	-/D	-1
$\chi_{13}^{(46)}$	-A	.	.	C	.	-C	A	-A	.	/C	.	-/C	/B	.	-/B	.	/C	-/C	/A	-/A	C	-C	-1
$\chi_{13}^{(47)}$	-/A	.	.	/C	.	-/C	/A	-/A	.	C	.	-C	B	.	-B	.	C	-C	A	-A	/C	-/C	-1
$\chi_{13}^{(48)}$	-B	.	.	D	.	-D	B	-B	.	/D	.	-/D	A	.	-A	.	/D	-/D	/B	-/B	D	-D	-1
$\chi_{13}^{(49)}$	/B	.	.	-/D	.	-/D	-/B	-/B	.	-D	.	-D	/A	.	/A	.	D	D	-B	-B	/D	/D	-1
$\chi_{13}^{(50)}$	A	.	.	-C	.	-C	-A	-A	.	-/C	.	-/C	/B	.	/B	.	/C	/C	-/A	-/A	C	C	-1
$\chi_{13}^{(51)}$	/A	.	.	-/C	.	-/C	-/A	-/A	.	-C	.	-C	B	.	B	.	C	C	-A	-A	/C	/C	-1
$\chi_{13}^{(52)}$	B	.	.	-D	.	-D	-B	-B	.	-/D	.	-/D	A	.	A	.	/D	/D	-/B	-/B	D	D	-1
$\chi_{13}^{(53)}$	/B	.	.	/D	.	/D	/B	/B	.	D	.	D	/A	.	/A	.	D	D	B	B	/D	/D	-1
$\chi_{13}^{(54)}$	A	.	.	C	.	C	A	A	.	/C	.	/C	/B	.	/B	.	/C	/C	/A	/A	C	C	-1
$\chi_{13}^{(55)}$	/A	.	.	/C	.	/C	/A	/A	.	C	.	C	B	.	B	.	C	C	A	A	/C	/C	-1
$\chi_{13}^{(56)}$	B	.	.	D	.	D	B	B	.	/D	.	/D	A	.	A	.	/D	/D	/B	/B	D	D	-1
$\chi_{13}^{(57)}$	-/B	.	.	-/D	.	/D	-/B	/B	.	-D	.	D	/A	.	-/A	.	D	-D	-B</				

	50							60						
$\chi_{13}^{(21)}$	-1	1	-1	-/A	-/A	-A	1	-A	A	-A	A	A	A	A
$\chi_{13}^{(22)}$	-1	1	-1	-/B	-/B	-B	1	-B	B	-B	B	B	B	B
$\chi_{13}^{(23)}$	-1	1	-1	-B	-B	-/B	1	-/B	/B	-/B	/B	/B	/B	/B
$\chi_{13}^{(24)}$	-1	1	-1	-A	-A	-/A	1	-/A	/A	-/A	/A	/A	/A	/A
$\chi_{13}^{(25)}$	1	-1	-1	-/A	/A	-A	-1	-A	-A	A	A	-A	A	A
$\chi_{13}^{(26)}$	1	-1	-1	-/B	/B	-B	-1	-B	-B	B	B	-B	B	B
$\chi_{13}^{(27)}$	1	-1	-1	-B	B	-/B	-1	-/B	-/B	/B	/B	-/B	/B	/B
$\chi_{13}^{(28)}$	1	-1	-1	-A	A	-/A	-1	-/A	-/A	/A	/A	-/A	/A	/A
$\chi_{13}^{(29)}$	1	1	1	-/A	-/A	-A	1	A	A	A	A	A	A	A
$\chi_{13}^{(30)}$	1	1	1	-/B	-/B	-B	1	B	B	B	B	B	B	B
$\chi_{13}^{(31)}$	1	1	1	-B	-B	-/B	1	/B	/B	/B	/B	/B	/B	/B
$\chi_{13}^{(32)}$	1	1	1	-A	-A	-/A	1	/A	/A	/A	/A	/A	/A	/A
$\chi_{13}^{(33)}$	1	-1	-1	-/A	/A	-A	-1	A	A	-A	-A	A	-A	-A
$\chi_{13}^{(34)}$	1	-1	-1	-/B	/B	-B	-1	B	B	-B	-B	B	-B	-B
$\chi_{13}^{(35)}$	1	-1	-1	-B	B	-/B	-1	/B	/B	-/B	-/B	/B	-/B	-/B
$\chi_{13}^{(36)}$	1	-1	-1	-A	A	-/A	-1	/A	/A	-/A	-/A	/A	-/A	-/A
$\chi_{13}^{(37)}$	1	1	1	-/A	-/A	-A	1	-A	-A	-A	-A	-A	-A	-A
$\chi_{13}^{(38)}$	1	1	1	-/B	-/B	-B	1	-B	-B	-B	-B	-B	-B	-B
$\chi_{13}^{(39)}$	1	1	1	-B	-B	-/B	1	-/B	-/B	-/B	-/B	-/B	-/B	-/B
$\chi_{13}^{(40)}$	1	1	1	-A	-A	-/A	1	-/A	-/A	-/A	-/A	-/A	-/A	-/A
$\chi_{13}^{(41)}$	.	1	.	2	-2	-1	-2	.	2	.	-2	-1	1	1
$\chi_{13}^{(42)}$	.	-1	.	2	2	-1	2	.	-2	.	-2	1	1	1
$\chi_{13}^{(43)}$	.	-1	.	2	2	-1	2	.	2	.	2	-1	-1	-1
$\chi_{13}^{(44)}$	.	1	.	2	-2	-1	-2	.	-2	.	2	1	-1	-1
$\chi_{13}^{(45)}$	.	1	.	/C	-/C	A	-2	.	C	.	-C	A	-A	-A
$\chi_{13}^{(46)}$	.	1	.	/D	-/D	B	-2	.	D	.	-D	B	-B	-B
$\chi_{13}^{(47)}$	.	1	.	D	-D	/B	-2	.	/D	.	-/D	/B	-/B	-/B
$\chi_{13}^{(48)}$	.	1	.	C	-C	/A	-2	.	/C	.	-/C	/A	-/A	-/A
$\chi_{13}^{(49)}$	.	-1	.	/C	/C	A	2	.	-C	.	-C	-A	-A	-A
$\chi_{13}^{(50)}$	.	-1	.	/D	/D	B	2	.	-D	.	-D	-B	-B	-B
$\chi_{13}^{(51)}$	.	-1	.	D	D	/B	2	.	-/D	.	-/D	-/B	-/B	-/B
$\chi_{13}^{(52)}$	.	-1	.	C	C	/A	2	.	-/C	.	-/C	-/A	-/A	-/A
$\chi_{13}^{(53)}$	.	-1	.	/C	/C	A	2	.	C	.	C	A	A	A
$\chi_{13}^{(54)}$	.	-1	.	/D	/D	B	2	.	D	.	D	B	B	B
$\chi_{13}^{(55)}$	.	-1	.	D	D	/B	2	.	/D	.	/D	/B	/B	/B
$\chi_{13}^{(56)}$	.	-1	.	C	C	/A	2	.	/C	.	/C	/A	/A	/A
$\chi_{13}^{(57)}$	.	1	.	/C	-/C	A	-2	.	-C	.	C	-A	A	A
$\chi_{13}^{(58)}$	.	1	.	/D	-/D	B	-2	.	-D	.	D	-B	B	B
$\chi_{13}^{(59)}$	.	1	.	D	-D	/B	-2	.	-/D	.	/D	-/B	/B	/B
$\chi_{13}^{(60)}$	.	1	.	C	-C	/A	-2	.	-/C	.	/C	-/A	/A	/A

where $A = -E(5)^3, B = -E(5), C = 2 \cdot E(5)^3, D = 2 \cdot E(5)$.

[illegible]

$$\begin{pmatrix} -1 & 0 & 0 & 0 & -1 & 2 & 0 & 0 \\ -1 & 1 & 1 & -1 & -2 & 3 & 0 & 0 \\ -1 & 1 & 0 & 0 & -3 & 4 & 0 & 0 \\ -2 & 2 & 1 & -1 & -4 & 6 & 0 & -1 \\ -2 & 1 & 1 & 0 & -4 & 5 & 0 & -1 \\ -2 & 1 & 1 & 0 & -3 & 4 & -1 & 0 \\ -1 & 1 & 0 & 0 & -2 & 3 & -1 & 0 \\ 0 & 0 & 0 & 0 & -1 & 2 & -1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 0 & -1 & 1 & 0 & 0 & 0 & -1 \\ -1 & 1 & -1 & 1 & -1 & 0 & 1 & -2 \\ -1 & 1 & -2 & 1 & 0 & 0 & 1 & -3 \\ -2 & 1 & -2 & 2 & -1 & 0 & 2 & -5 \\ -1 & 1 & -2 & 2 & -1 & 0 & 1 & -4 \\ -1 & 1 & -1 & 1 & 0 & -1 & 1 & -3 \\ -1 & 1 & 0 & 0 & 0 & 0 & 0 & -2 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 1 & -1 & 0 & 0 & 0 & 1 \\ 1 & -1 & 1 & -1 & 1 & 0 & -1 & 2 \\ 1 & -1 & 2 & -1 & 0 & 0 & -1 & 3 \\ 2 & -1 & 2 & -2 & 1 & 0 & -2 & 5 \\ 1 & -1 & 2 & -2 & 1 & 0 & -1 & 4 \\ 1 & -1 & 1 & -1 & 0 & 1 & -1 & 3 \\ 1 & -1 & 0 & 0 & 0 & 0 & 0 & 2 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \\
\begin{pmatrix} -1 & 0 & -1 & 1 & 0 & 0 & 0 & -1 \\ -2 & 1 & -1 & 1 & 0 & -1 & 1 & -1 \\ -2 & 1 & -2 & 1 & 1 & -1 & 1 & -2 \\ -4 & 1 & -2 & 2 & 1 & -2 & 2 & -3 \\ -3 & 1 & -2 & 2 & 1 & -2 & 1 & -2 \\ -2 & 1 & -1 & 1 & 1 & -2 & 1 & -2 \\ -2 & 1 & 0 & 0 & 1 & -1 & 0 & -1 \\ -1 & 0 & 0 & 0 & 1 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 1 & -1 & 0 & 0 & 0 & 1 \\ 2 & -1 & 1 & -1 & 0 & 1 & -1 & 1 \\ 2 & -1 & 2 & -1 & -1 & 1 & -1 & 2 \\ 4 & -1 & 2 & -2 & -1 & 2 & -2 & 3 \\ 3 & -1 & 2 & -2 & -1 & 2 & -1 & 2 \\ 2 & -1 & 1 & -1 & -1 & 2 & -1 & 2 \\ 2 & -1 & 0 & 0 & -1 & 1 & 0 & 1 \\ 1 & 0 & 0 & 0 & -1 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 0 & 1 & -1 & 0 & 1 & 0 \\ 0 & -1 & 0 & 1 & -2 & 0 & 2 & 0 \\ -1 & -1 & 0 & 2 & -3 & 0 & 2 & 0 \\ 0 & -2 & -1 & 3 & -4 & 0 & 3 & 0 \\ 0 & -2 & 0 & 2 & -3 & 0 & 2 & 0 \\ 0 & -1 & 0 & 1 & -2 & 0 & 1 & 1 \\ 0 & -1 & 0 & 1 & -2 & 1 & 0 & 1 \\ 0 & 0 & 0 & 0 & -1 & 1 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 1 & 1 & 0 & -1 & 1 & 0 & -1 & 0 \\ 0 & 1 & 0 & -1 & 2 & 0 & -2 & 0 \\ 1 & 1 & 0 & -2 & 3 & 0 & -2 & 0 \\ 0 & 2 & 1 & -3 & 4 & 0 & -3 & 0 \\ 0 & 2 & 0 & -2 & 3 & 0 & -2 & 0 \\ 0 & 1 & 0 & -1 & 2 & 0 & -1 & -1 \\ 0 & 1 & 0 & -1 & 2 & -1 & 0 & -1 \\ 0 & 0 & 0 & 0 & 1 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 0 & 1 & -1 & 0 & 1 & 0 \\ -1 & -1 & 0 & 1 & -1 & -1 & 2 & 1 \\ -2 & -1 & 0 & 2 & -2 & -1 & 2 & 1 \\ -2 & -2 & -1 & 3 & -2 & -2 & 3 & 2 \\ -2 & -2 & 0 & 2 & -1 & -2 & 2 & 2 \\ -1 & -1 & 0 & 1 & -1 & -1 & 1 & 2 \\ -1 & -1 & 0 & 1 & -1 & 0 & 0 & 2 \\ -1 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 1 & 1 & 0 & -1 & 1 & 0 & -1 & 0 \\ 1 & 1 & 0 & -1 & 1 & 1 & -2 & -1 \\ 2 & 1 & 0 & -2 & 2 & 1 & -2 & -1 \\ 2 & 2 & 1 & -3 & 2 & 2 & -3 & -2 \\ 2 & 2 & 0 & -2 & 1 & 2 & -2 & -2 \\ 1 & 1 & 0 & -1 & 1 & 1 & -1 & -2 \\ 1 & 1 & 0 & -1 & 1 & 0 & 0 & -2 \\ 1 & 0 & 0 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \\
\begin{pmatrix} 1 & 1 & -1 & 0 & 0 & 1 & -2 & 1 \\ 1 & 1 & -1 & 0 & -1 & 3 & -3 & 1 \\ 2 & 2 & -2 & 0 & -1 & 3 & -3 & 1 \\ 3 & 2 & -3 & 0 & -1 & 5 & -5 & 1 \\ 2 & 2 & -2 & 0 & -1 & 4 & -4 & 0 \\ 1 & 2 & -1 & -1 & 0 & 3 & -3 & 0 \\ 1 & 2 & -1 & -1 & 0 & 2 & -2 & 0 \\ 1 & 1 & 0 & -1 & 0 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 1 & 0 & 0 & -1 & 2 & -1 \\ -1 & -1 & 1 & 0 & 1 & -3 & 3 & -1 \\ -2 & -2 & 2 & 0 & 1 & -3 & 3 & -1 \\ -3 & -2 & 3 & 0 & 1 & -5 & 5 & -1 \\ -2 & -2 & 2 & 0 & 1 & -4 & 4 & 0 \\ -1 & -2 & 1 & 1 & 0 & -3 & 3 & 0 \\ -1 & -2 & 1 & 1 & 0 & -2 & 2 & 0 \\ -1 & -1 & 0 & 1 & 0 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 1 & -1 & 0 & 0 & 1 & -2 & 1 \\ 0 & 1 & -1 & 0 & 0 & 2 & -3 & 2 \\ 1 & 2 & -2 & 0 & 0 & 2 & -3 & 2 \\ 1 & 2 & -3 & 0 & 1 & 3 & -5 & 3 \\ 0 & 2 & -2 & 0 & 1 & 2 & -4 & 2 \\ 0 & 2 & -1 & -1 & 1 & 2 & -3 & 1 \\ 0 & 2 & -1 & -1 & 1 & 1 & -2 & 1 \\ 0 & 1 & 0 & -1 & 1 & 0 & -1 & 1 \end{pmatrix}, \\
\begin{pmatrix} -1 & -1 & 1 & 0 & 0 & -1 & 2 & -1 \\ 0 & -1 & 1 & 0 & 0 & -2 & 3 & -2 \\ -1 & -2 & 2 & 0 & 0 & -2 & 3 & -2 \\ -1 & -2 & 3 & 0 & -1 & -3 & 5 & -3 \\ 0 & -2 & 2 & 0 & -1 & -2 & 4 & -2 \\ 0 & -2 & 1 & 1 & -1 & -2 & 3 & -1 \\ 0 & -2 & 1 & 1 & -1 & -1 & 2 & -1 \\ 0 & -1 & 0 & 1 & -1 & 0 & 1 & -1 \end{pmatrix}, \begin{pmatrix} -1 & 1 & 0 & 0 & 0 & -1 & 1 & -1 \\ -2 & 1 & 1 & 0 & -1 & 0 & 1 & -2 \\ -2 & 2 & 1 & -1 & 0 & -1 & 2 & -3 \\ -3 & 2 & 1 & 0 & -1 & -1 & 3 & -5 \\ -2 & 2 & 0 & 0 & -1 & 0 & 2 & -4 \\ -2 & 2 & 0 & 0 & -1 & 0 & 2 & -3 \\ -1 & 2 & 0 & 0 & -1 & 0 & 1 & -2 \\ 0 & 1 & 0 & 0 & -1 & 0 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 1 & -1 & 0 & 0 & 0 & 1 & -1 & 1 \\ 2 & -1 & -1 & 0 & 1 & 0 & -1 & 2 \\ 2 & -2 & -1 & 1 & 0 & 1 & -2 & 3 \\ 3 & -2 & -1 & 0 & 1 & 1 & -3 & 5 \\ 2 & -2 & 0 & 0 & 1 & 0 & -2 & 4 \\ 2 & -2 & 0 & 0 & 1 & 0 & -2 & 3 \\ 1 & -2 & 0 & 0 & 1 & 0 & -1 & 2 \\ 0 & -1 & 0 & 0 & 1 & 0 & -1 & 1 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} -1 & -1 & 1 & 0 & 0 & -1 & 2 & -1 \\ -2 & -1 & 1 & 0 & 1 & -2 & 2 & -1 \\ -2 & -2 & 2 & 0 & 1 & -3 & 3 & -1 \\ -4 & -2 & 3 & 0 & 1 & -4 & 4 & -1 \\ -3 & -2 & 2 & 0 & 1 & -3 & 3 & 0 \\ -2 & -2 & 1 & 1 & 0 & -2 & 2 & 0 \\ -1 & -1 & 0 & 1 & 0 & -2 & 2 & 0 \\ -1 & -1 & 0 & 1 & 0 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 1 & -1 & 0 & 0 & 1 & -2 & 1 \\ 1 & 1 & -1 & 0 & 0 & 1 & -2 & 2 \\ 1 & 2 & -2 & 0 & 0 & 2 & -3 & 2 \\ 2 & 2 & -3 & 0 & 1 & 2 & -4 & 3 \\ 1 & 2 & -2 & 0 & 1 & 1 & -3 & 2 \\ 1 & 2 & -1 & -1 & 1 & 1 & -2 & 1 \\ 0 & 1 & 0 & -1 & 1 & 1 & -2 & 1 \\ 0 & 1 & 0 & -1 & 1 & 0 & -1 & 1 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 1 & 0 & 0 & -1 & 2 & -1 \\ -1 & -1 & 1 & 0 & 0 & -1 & 2 & -2 \\ -1 & -2 & 2 & 0 & 0 & -2 & 3 & -2 \\ -2 & -2 & 3 & 0 & -1 & -2 & 4 & -3 \\ -1 & -2 & 2 & 0 & -1 & -1 & 3 & -2 \\ -1 & -2 & 1 & 1 & -1 & -1 & 2 & -1 \\ 0 & -1 & 0 & 1 & -1 & -1 & 2 & -1 \\ 0 & -1 & 0 & 1 & -1 & 0 & 1 & -1 \end{pmatrix}, \\
\begin{pmatrix} 1 & 0 & 0 & 0 & 0 & 0 & -2 & 2 \\ 1 & 1 & 0 & 0 & 0 & -1 & -2 & 3 \\ 1 & 1 & 0 & 0 & 0 & 0 & -4 & 4 \\ 2 & 1 & -1 & 1 & 0 & -1 & -5 & 6 \\ 2 & 1 & -1 & 0 & 1 & -1 & -4 & 5 \\ 2 & 1 & -1 & 0 & 0 & 0 & -3 & 4 \\ 1 & 0 & 0 & 0 & 0 & 0 & -2 & 3 \\ 0 & 0 & 0 & 0 & 0 & 0 & -1 & 2 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 0 & 0 & 0 & 0 & 2 & -2 \\ -1 & -1 & 0 & 0 & 0 & 1 & 2 & -3 \\ -1 & -1 & 0 & 0 & 0 & 0 & 4 & -4 \\ -2 & -1 & 1 & -1 & 0 & 1 & 5 & -6 \\ -2 & -1 & 1 & 0 & -1 & 1 & 4 & -5 \\ -2 & -1 & 1 & 0 & 0 & 0 & 3 & -4 \\ -1 & 0 & 0 & 0 & 0 & 0 & 2 & -3 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & -2 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 0 & 0 & 0 & 0 & -2 & 2 \\ 2 & 1 & 0 & 0 & -1 & 0 & -2 & 2 \\ 2 & 1 & 0 & 0 & -1 & 1 & -4 & 3 \\ 4 & 1 & -1 & 1 & -2 & 1 & -5 & 4 \\ 4 & 1 & -1 & 0 & -1 & 1 & -4 & 3 \\ 3 & 1 & -1 & 0 & -1 & 1 & -3 & 3 \\ 2 & 0 & 0 & 0 & -1 & 1 & -2 & 2 \\ 1 & 0 & 0 & 0 & -1 & 1 & -1 & 1 \end{pmatrix}, \\
\begin{pmatrix} -1 & 0 & 0 & 0 & 0 & 0 & 2 & -2 \\ -2 & -1 & 0 & 0 & 1 & 0 & 2 & -2 \\ -2 & -1 & 0 & 0 & 1 & -1 & 4 & -3 \\ -4 & -1 & 1 & -1 & 2 & -1 & 5 & -4 \\ -4 & -1 & 1 & 0 & 1 & -1 & 4 & -3 \\ -3 & -1 & 1 & 0 & 1 & -1 & 3 & -3 \\ -2 & 0 & 0 & 0 & 1 & -1 & 2 & -2 \\ -1 & 0 & 0 & 0 & 1 & -1 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 0 & -2 & 1 & 0 & 1 & 0 & -1 & 0 \\ 0 & -2 & 1 & -1 & 3 & -1 & -1 & 0 \\ 0 & -3 & 2 & -1 & 3 & -1 & -1 & 0 \\ 0 & -4 & 2 & -1 & 5 & -2 & -2 & 0 \\ 0 & -3 & 2 & -1 & 4 & -2 & -2 & 1 \\ 1 & -2 & 1 & -1 & 3 & -1 & -2 & 1 \\ 0 & -1 & 1 & -1 & 2 & 0 & -2 & 1 \\ 0 & -1 & 0 & 0 & 1 & 0 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 2 & -1 & 0 & -1 & 0 & 1 & 0 \\ 0 & 2 & -1 & 1 & -3 & 1 & 1 & 0 \\ 0 & 3 & -2 & 1 & -3 & 1 & 1 & 0 \\ 0 & 4 & -2 & 1 & -5 & 2 & 2 & 0 \\ 0 & 3 & -2 & 1 & -4 & 2 & 2 & -1 \\ -1 & 2 & -1 & 1 & -3 & 1 & 2 & -1 \\ 0 & 1 & -1 & 1 & -2 & 0 & 2 & -1 \\ 0 & 1 & 0 & 0 & -1 & 0 & 1 & -1 \end{pmatrix}, \\
\begin{pmatrix} 0 & -2 & 1 & 0 & 1 & 0 & -1 & 0 \\ 1 & -2 & 1 & -1 & 2 & 0 & -1 & -1 \\ 1 & -3 & 2 & -1 & 2 & 0 & -1 & -1 \\ 2 & -4 & 2 & -1 & 3 & 0 & -2 & -2 \\ 2 & -3 & 2 & -1 & 2 & 0 & -2 & -1 \\ 2 & -2 & 1 & -1 & 2 & 0 & -2 & 0 \\ 1 & -1 & 1 & -1 & 1 & 1 & -2 & 0 \\ 1 & -1 & 0 & 0 & 0 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 2 & -1 & 0 & -1 & 0 & 1 & 0 \\ -1 & 2 & -1 & 1 & -2 & 0 & 1 & 1 \\ -1 & 3 & -2 & 1 & -2 & 0 & 1 & 1 \\ -2 & 4 & -2 & 1 & -3 & 0 & 2 & 2 \\ -2 & 3 & -2 & 1 & -2 & 0 & 2 & 1 \\ -2 & 2 & -1 & 1 & -2 & 0 & 2 & 0 \\ -1 & 1 & -1 & 1 & -1 & -1 & 2 & 0 \\ -1 & 1 & 0 & 0 & 0 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -1 & -1 & 0 & 1 & 0 & 1 & -1 \\ 0 & -1 & -1 & 0 & 1 & 0 & 2 & -3 \\ 1 & -2 & -2 & 0 & 2 & 0 & 2 & -3 \\ 1 & -3 & -3 & 1 & 2 & 0 & 3 & -5 \\ 1 & -2 & -2 & 0 & 2 & 0 & 2 & -4 \\ 0 & -2 & -1 & 0 & 2 & 0 & 1 & -3 \\ 0 & -1 & -1 & 0 & 1 & 1 & 0 & -2 \\ 0 & -1 & 0 & 0 & 0 & 1 & 0 & -1 \end{pmatrix}, \\
\begin{pmatrix} 0 & 1 & 1 & 0 & -1 & 0 & -1 & 1 \\ 0 & 1 & 1 & 0 & -1 & 0 & -2 & 3 \\ -1 & 2 & 2 & 0 & -2 & 0 & -2 & 3 \\ -1 & 3 & 3 & -1 & -2 & 0 & -3 & 5 \\ -1 & 2 & 2 & 0 & -2 & 0 & -2 & 4 \\ 0 & 2 & 1 & 0 & -2 & 0 & -1 & 3 \\ 0 & 1 & 1 & 0 & -1 & -1 & 0 & 2 \\ 0 & 1 & 0 & 0 & 0 & -1 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & -1 & -1 & 0 & 1 & 0 & 1 & -1 \\ -1 & -1 & -1 & 0 & 2 & -1 & 2 & -2 \\ 0 & -2 & -2 & 0 & 3 & -1 & 2 & -2 \\ -1 & -3 & -3 & 1 & 4 & -2 & 3 & -3 \\ -1 & -2 & -2 & 0 & 4 & -2 & 2 & -2 \\ -1 & -2 & -1 & 0 & 3 & -1 & 1 & -2 \\ -1 & -1 & -1 & 0 & 2 & 0 & 0 & -1 \\ -1 & -1 & 0 & 0 & 1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 1 & 0 & -1 & 0 & -1 & 1 \\ 1 & 1 & 1 & 0 & -2 & 1 & -2 & 2 \\ 0 & 2 & 2 & 0 & -3 & 1 & -2 & 2 \\ 1 & 3 & 3 & -1 & -4 & 2 & -3 & 3 \\ 1 & 2 & 2 & 0 & -4 & 2 & -2 & 2 \\ 1 & 2 & 1 & 0 & -3 & 1 & -1 & 2 \\ 1 & 1 & 1 & 0 & -2 & 0 & 0 & 1 \\ 1 & 1 & 0 & 0 & -1 & 0 & 0 & 0 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} 2 & 0 & -1 & 0 & 1 & -1 & -1 & 1 \\ 3 & 0 & -1 & 0 & 1 & -2 & 0 & 0 \\ 4 & 1 & -2 & 0 & 1 & -2 & -1 & 1 \\ 6 & 0 & -3 & 1 & 1 & -3 & -1 & 1 \\ 5 & 0 & -2 & 0 & 1 & -2 & -1 & 1 \\ 4 & 0 & -2 & 0 & 1 & -2 & 0 & 1 \\ 3 & 0 & -1 & 0 & 0 & -1 & 0 & 1 \\ 2 & 0 & -1 & 0 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -2 & 0 & 1 & 0 & -1 & 1 & 1 & -1 \\ -3 & 0 & 1 & 0 & -1 & 2 & 0 & 0 \\ -4 & -1 & 2 & 0 & -1 & 2 & 1 & -1 \\ -6 & 0 & 3 & -1 & -1 & 3 & 1 & -1 \\ -5 & 0 & 2 & 0 & -1 & 2 & 1 & -1 \\ -4 & 0 & 2 & 0 & -1 & 2 & 0 & -1 \\ -3 & 0 & 1 & 0 & 0 & 1 & 0 & -1 \\ -2 & 0 & 1 & 0 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 2 & 0 & -1 & 0 & 1 & -1 & -1 & 1 \\ 2 & 0 & -1 & 0 & 2 & -3 & 0 & 1 \\ 3 & 1 & -2 & 0 & 2 & -3 & -1 & 2 \\ 4 & 0 & -3 & 1 & 3 & -5 & -1 & 3 \\ 3 & 0 & -2 & 0 & 3 & -4 & -1 & 3 \\ 3 & 0 & -2 & 0 & 2 & -3 & 0 & 2 \\ 2 & 0 & -1 & 0 & 1 & -2 & 0 & 2 \\ 1 & 0 & -1 & 0 & 1 & -1 & 0 & 1 \end{pmatrix}, \\
\begin{pmatrix} -2 & 0 & 1 & 0 & -1 & 1 & 1 & -1 \\ -2 & 0 & 1 & 0 & -2 & 3 & 0 & -1 \\ -3 & -1 & 2 & 0 & -2 & 3 & 1 & -2 \\ -4 & 0 & 3 & -1 & -3 & 5 & 1 & -3 \\ -3 & 0 & 2 & 0 & -3 & 4 & 1 & -3 \\ -3 & 0 & 2 & 0 & -2 & 3 & 0 & -2 \\ -2 & 0 & 1 & 0 & -1 & 2 & 0 & -2 \\ -1 & 0 & 1 & 0 & -1 & 1 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 1 & 1 & 0 & -2 & 1 & 0 & 1 & 0 \\ 1 & 1 & 0 & -3 & 3 & -1 & 1 & 0 \\ 1 & 2 & 0 & -4 & 3 & -1 & 2 & 0 \\ 2 & 2 & -1 & -5 & 5 & -2 & 3 & 0 \\ 1 & 1 & 0 & -4 & 4 & -2 & 3 & 0 \\ 1 & 0 & 0 & -3 & 3 & -1 & 2 & 0 \\ 1 & 0 & 0 & -2 & 2 & -1 & 1 & 1 \\ 0 & 0 & 0 & -1 & 1 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 0 & 2 & -1 & 0 & -1 & 0 \\ -1 & -1 & 0 & 3 & -3 & 1 & -1 & 0 \\ -1 & -2 & 0 & 4 & -3 & 1 & -2 & 0 \\ -2 & -2 & 1 & 5 & -5 & 2 & -3 & 0 \\ -1 & -1 & 0 & 4 & -4 & 2 & -3 & 0 \\ -1 & 0 & 0 & 3 & -3 & 1 & -2 & 0 \\ -1 & 0 & 0 & 2 & -2 & 1 & -1 & -1 \\ 0 & 0 & 0 & 1 & -1 & 0 & 0 & -1 \end{pmatrix}, \\
\begin{pmatrix} 1 & 1 & 0 & -2 & 1 & 0 & 1 & 0 \\ 2 & 1 & 0 & -3 & 2 & 0 & 1 & -1 \\ 2 & 2 & 0 & -4 & 2 & 0 & 2 & -1 \\ 4 & 2 & -1 & -5 & 3 & 0 & 3 & -2 \\ 3 & 1 & 0 & -4 & 2 & 0 & 3 & -2 \\ 2 & 0 & 0 & -3 & 2 & 0 & 2 & -1 \\ 2 & 0 & 0 & -2 & 1 & 0 & 1 & 0 \\ 1 & 0 & 0 & -1 & 0 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 0 & 2 & -1 & 0 & -1 & 0 \\ -2 & -1 & 0 & 3 & -2 & 0 & -1 & 1 \\ -2 & -2 & 0 & 4 & -2 & 0 & -2 & 1 \\ -4 & -2 & 1 & 5 & -3 & 0 & -3 & 2 \\ -3 & -1 & 0 & 4 & -2 & 0 & -3 & 2 \\ -2 & 0 & 0 & 3 & -2 & 0 & -2 & 1 \\ -2 & 0 & 0 & 2 & -1 & 0 & -1 & 0 \\ -1 & 0 & 0 & 1 & 0 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 1 & 1 & 0 & -1 & -1 & 2 & -1 \\ -1 & 2 & 1 & -1 & 0 & -2 & 3 & -1 \\ -2 & 2 & 1 & 0 & -1 & -2 & 4 & -2 \\ -2 & 3 & 1 & 0 & -1 & -4 & 6 & -2 \\ -2 & 2 & 1 & 0 & 0 & -4 & 5 & -2 \\ -1 & 1 & 1 & 0 & 0 & -3 & 4 & -2 \\ -1 & 1 & 1 & 0 & 0 & -2 & 2 & -1 \\ -1 & 0 & 1 & 0 & 0 & -1 & 1 & 0 \end{pmatrix}, \\
\begin{pmatrix} 1 & -1 & -1 & 0 & 1 & 1 & -2 & 1 \\ 1 & -2 & -1 & 1 & 0 & 2 & -3 & 1 \\ 2 & -2 & -1 & 0 & 1 & 2 & -4 & 2 \\ 2 & -3 & -1 & 0 & 1 & 4 & -6 & 2 \\ 2 & -2 & -1 & 0 & 0 & 4 & -5 & 2 \\ 1 & -1 & -1 & 0 & 0 & 3 & -4 & 2 \\ 1 & -1 & -1 & 0 & 0 & 2 & -2 & 1 \\ 1 & 0 & -1 & 0 & 0 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 1 & 1 & 0 & -1 & -1 & 2 & -1 \\ 0 & 2 & 1 & -1 & -1 & -1 & 3 & -2 \\ -1 & 2 & 1 & 0 & -2 & -1 & 4 & -3 \\ 0 & 3 & 1 & 0 & -3 & -2 & 6 & -4 \\ 0 & 2 & 1 & 0 & -2 & -2 & 5 & -4 \\ 0 & 1 & 1 & 0 & -1 & -2 & 4 & -3 \\ 0 & 1 & 1 & 0 & -1 & -1 & 2 & -2 \\ 0 & 0 & 1 & 0 & -1 & 0 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 1 & -1 & -1 & 0 & 1 & 1 & -2 & 1 \\ 0 & -2 & -1 & 1 & 1 & 1 & -3 & 2 \\ 1 & -2 & -1 & 0 & 2 & 1 & -4 & 3 \\ 0 & -3 & -1 & 0 & 3 & 2 & -6 & 4 \\ 0 & -2 & -1 & 0 & 2 & 2 & -5 & 4 \\ 0 & -1 & -1 & 0 & 1 & 2 & -4 & 3 \\ 0 & -1 & -1 & 0 & 1 & 1 & -2 & 2 \\ 0 & 0 & -1 & 0 & 1 & 0 & -1 & 1 \end{pmatrix}.
\end{pmatrix}$$

The character table of $G^{s_{14}}$:

	10																20							
$\chi_{14}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{14}^{(2)}$	1	-1	-1	1	-1	1	1	-1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	-1	1	1	1
$\chi_{14}^{(3)}$	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1
$\chi_{14}^{(4)}$	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1
$\chi_{14}^{(5)}$	7	7	7	7	.	.	.	.	.	.	.	.	.	.	.	.	4	4	4	4	3	3	3	3
$\chi_{14}^{(6)}$	7	7	-7	-7	.	.	.	.	.	.	.	.	.	.	.	.	-4	-4	4	4	3	3	-3	-3
$\chi_{14}^{(7)}$	7	-7	7	-7	.	.	.	.	.	.	.	.	.	.	.	.	-4	4	-4	4	-3	3	-3	-3
$\chi_{14}^{(8)}$	7	-7	-7	7	.	.	.	.	.	.	.	.	.	.	.	.	4	-4	-4	4	-3	3	3	3
$\chi_{14}^{(9)}$	15	15	15	15	1	1	1	1	-2	-2	-2	-2	.	.	.	.	.	.	.	.	3	3	3	3
$\chi_{14}^{(10)}$	15	15	-15	-15	-1	-1	1	1	-2	-2	2	2	.	.	.	.	.	.	.	.	3	3	-3	-3
$\chi_{14}^{(11)}$	15	-15	15	-15	1	-1	1	-1	-2	2	-2	2	.	.	.	.	.	.	.	.	-3	3	-3	-3
$\chi_{14}^{(12)}$	15	-15	-15	15	-1	1	1	-1	-2	2	2	-2	.	.	.	.	.	.	.	.	-3	3	3	3
$\chi_{14}^{(13)}$	21	21	21	21	.	.	.	.	.	.	.	.	2	2	2	2	6	6	6	6	5	5	5	5
$\chi_{14}^{(14)}$	21	21	-21	-21	.	.	.	.	.	.	.	.	2	2	-2	-2	-6	-6	6	6	5	5	-5	-5
$\chi_{14}^{(15)}$	21	-21	21	-21	.	.	.	.	.	.	.	.	2	-2	2	-2	-6	6	-6	6	-5	5	-5	-5
$\chi_{14}^{(16)}$	21	-21	-21	21	.	.	.	.	.	.	.	.	2	-2	-2	2	6	-6	-6	6	-5	5	5	5
$\chi_{14}^{(17)}$	21	21	21	21	.	.	.	.	.	.	.	.	-2	-2	-2	-2	6	6	6	6	1	1	1	1
$\chi_{14}^{(18)}$	21	21	-21	-21	.	.	.	.	.	.	.	.	-2	-2	2	2	-6	-6	6	6	1	1	-1	-1
$\chi_{14}^{(19)}$	21	-21	21	-21	.	.	.	.	.	.	.	.	-2	2	-2	2	-6	6	-6	6	-1	1	-1	-1
$\chi_{14}^{(20)}$	21	-21	-21	21	.	.	.	.	.	.	.	.	-2	2	2	-2	6	-6	-6	6	-1	1	1	1
$\chi_{14}^{(21)}$	27	27	27	27	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	9	9	9	9	7	7	7	7
$\chi_{14}^{(22)}$	27	27	-27	-27	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-9	-9	9	9	7	7	-7	-7
$\chi_{14}^{(23)}$	27	-27	27	-27	-1	1	-1	1	-1	1	-1	1	1	-1	1	-1	-9	9	-9	9	-7	7	-7	-7
$\chi_{14}^{(24)}$	27	-27	-27	27	1	-1	-1	1	-1	1	1	-1	1	-1	-1	1	9	-9	-9	9	-7	7	7	7
$\chi_{14}^{(25)}$	35	35	35	35	.	.	.	.	-1	-1	-1	-1	1	1	1	1	5	5	5	5	-5	-5	-5	-5
$\chi_{14}^{(26)}$	35	35	35	35	.	.	.	.	1	1	1	1	1	1	1	1	5	5	5	5	7	7	7	7
$\chi_{14}^{(27)}$	35	35	-35	-35	.	.	.	.	-1	-1	1	1	1	1	-1	-1	-5	-5	5	5	-5	-5	5	5
$\chi_{14}^{(28)}$	35	35	-35	-35	.	.	.	.	1	1	-1	-1	1	1	-1	-1	-5	-5	5	5	7	7	-7	-7
$\chi_{14}^{(29)}$	35	-35	35	-35	.	.	.	.	-1	1	-1	1	1	-1	1	-1	-5	5	-5	5	5	-5	5	5
$\chi_{14}^{(30)}$	35	-35	35	-35	.	.	.	.	1	-1	1	-1	1	-1	1	-1	-5	5	-5	5	-7	7	-7	-7
$\chi_{14}^{(31)}$	35	-35	-35	35	.	.	.	.	-1	1	1	-1	1	-1	-1	1	5	-5	-5	5	5	-5	-5	-5
$\chi_{14}^{(32)}$	35	-35	-35	35	.	.	.	.	1	-1	-1	1	1	-1	-1	1	5	-5	-5	5	-7	7	7	7
$\chi_{14}^{(33)}$	56	56	56	56	.	.	.	.	-1	-1	-1	-1	-1	-1	-1	-1	11	11	11	11	8	8	8	8
$\chi_{14}^{(34)}$	56	56	-56	-56	.	.	.	.	-1	-1	1	1	-1	-1	1	1	-11	-11	11	11	8	8	-8	-8
$\chi_{14}^{(35)}$	56	-56	56	-56	.	.	.	.	-1	1	-1	1	-1	1	-1	1	-11	11	-11	11	-8	8	-8	-8
$\chi_{14}^{(36)}$	56	-56	-56	56	.	.	.	.	-1	1	1	-1	-1	1	1	-1	11	-11	-11	11	-8	8	8	8
$\chi_{14}^{(37)}$	70	70	70	70	.	.	.	.	-1	-1	-1	-1	3	3	3	3	-5	-5	-5	-5	6	6	6	6
$\chi_{14}^{(38)}$	70	70	-70	-70	.	.	.	.	-1	-1	1	1	3	3	-3	-3	5	5	-5	-5	6	6	-6	-6
$\chi_{14}^{(39)}$	70	-70	70	-70	.	.	.	.	-1	1	-1	1	3	-3	3	-3	5	-5	5	-5	-6	6	-6	-6
$\chi_{14}^{(40)}$	70	-70	-70	70	.	.	.	.	-1	1	1	-1	3	-3	-3	3	-5	5	5	-5	-6	6	6	6
$\chi_{14}^{(41)}$	84	84	84	84	.	.	.	.	.	.	.	.	-2	-2	-2	-2	-6	-6	-6	-6	4	4	4	4
$\chi_{14}^{(42)}$	84	84	-84	-84	.	.	.	.	.	.	.	.	-2	-2	2	2	6	6	-6	-6	4	4	-4	-4
$\chi_{14}^{(43)}$	84	-84	84	-84	.	.	.	.	.	.	.	.	-2	2	-2	2	6	-6	6	-6	-4	4	-4	-4
$\chi_{14}^{(44)}$	84	-84	-84	84	-2	2	2	-2	-6	6	6	-6	-4	4	4	4
$\chi_{14}^{(45)}$	105	105	105	105	1	1	1	1	-1	-1	-1	-1	15	15	15	15	5	5	5	5

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$\chi_{14}^{(46)}$	105	105	105	105	2	2	2	2	-3	-3	-3
$\chi_{14}^{(47)}$	105	105	105	105	9	9	9
$\chi_{14}^{(48)}$	105	105	-105	-105	1	1	-1	-1	-1	-1	1	1	-15	-15	15	15	5	5	-5
$\chi_{14}^{(49)}$	105	105	-105	-105	.	.	.	.	2	2	-2	-2	.	.	.	.	.	.	.	.	-3	-3	3
$\chi_{14}^{(50)}$	105	105	-105	-105	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	9	9	-9
$\chi_{14}^{(51)}$	105	-105	105	-105	.	.	.	.	1	-1	1	-1	-1	1	-1	1	-15	15	-15	15	-5	5	-5
$\chi_{14}^{(52)}$	105	-105	105	-105	.	.	.	.	2	-2	2	-2	.	.	.	.	.	.	.	.	3	-3	3
$\chi_{14}^{(53)}$	105	-105	105	-105	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-9	9	-9
$\chi_{14}^{(54)}$	105	-105	-105	105	.	.	.	.	1	-1	-1	1	-1	1	1	-1	15	-15	-15	15	-5	5	5
$\chi_{14}^{(55)}$	105	-105	-105	105	.	.	.	.	2	-2	-2	2	.	.	.	.	.	.	.	.	3	-3	-3
$\chi_{14}^{(56)}$	105	-105	-105	105	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-9	9	9
$\chi_{14}^{(57)}$	120	120	120	120	1	1	1	1	1	1	1	1	-1	-1	-1	-1	15	15	15	15	8	8	8
$\chi_{14}^{(58)}$	120	120	-120	-120	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	-15	-15	15	15	8	8	-8
$\chi_{14}^{(59)}$	120	-120	120	-120	1	-1	1	-1	1	-1	1	-1	-1	1	-1	1	-15	15	-15	15	-8	8	-8
$\chi_{14}^{(60)}$	120	-120	-120	120	-1	1	1	-1	1	-1	-1	1	-1	1	1	-1	15	-15	-15	15	-8	8	8
$\chi_{14}^{(61)}$	168	168	168	168	.	.	.	.	.	.	.	.	2	2	2	2	6	6	6	6	8	8	8
$\chi_{14}^{(62)}$	168	168	-168	-168	.	.	.	.	.	.	.	.	2	2	-2	-2	-6	-6	6	6	8	8	-8
$\chi_{14}^{(63)}$	168	-168	168	-168	.	.	.	.	.	.	.	.	2	-2	2	-2	-6	6	-6	6	-8	8	-8
$\chi_{14}^{(64)}$	168	-168	-168	168	.	.	.	.	.	.	.	.	2	-2	-2	2	6	-6	-6	6	-8	8	8
$\chi_{14}^{(65)}$	189	189	189	189	.	.	.	.	1	1	1	1	1	1	1	1	9	9	9	9	13	13	13
$\chi_{14}^{(66)}$	189	189	189	189	.	.	.	.	-1	-1	-1	-1	1	1	1	1	9	9	9	9	1	1	1
$\chi_{14}^{(67)}$	189	189	-189	-189	.	.	.	.	1	1	-1	-1	1	1	-1	-1	-9	-9	9	9	13	13	-13
$\chi_{14}^{(68)}$	189	189	-189	-189	.	.	.	.	-1	-1	1	1	1	1	-1	-1	-9	-9	9	9	1	1	-1
$\chi_{14}^{(69)}$	189	-189	189	-189	.	.	.	.	1	-1	1	-1	1	-1	1	-1	-9	9	-9	9	-13	13	-13
$\chi_{14}^{(70)}$	189	-189	189	-189	.	.	.	.	-1	1	-1	1	1	-1	1	-1	-9	9	-9	9	-1	1	-1
$\chi_{14}^{(71)}$	189	-189	-189	189	.	.	.	.	1	-1	-1	1	1	-1	-1	1	9	-9	-9	9	-13	13	13
$\chi_{14}^{(72)}$	189	-189	-189	189	.	.	.	.	-1	1	1	-1	1	-1	-1	1	9	-9	-9	9	-1	1	1
$\chi_{14}^{(73)}$	189	189	189	189	.	.	.	.	1	1	1	1	1	1	1	1	9	9	9	9	-11	-11	-11
$\chi_{14}^{(74)}$	189	189	-189	-189	.	.	.	.	1	1	-1	-1	1	1	-1	-1	-9	-9	9	9	-11	-11	11
$\chi_{14}^{(75)}$	189	-189	189	-189	.	.	.	.	1	-1	1	-1	1	-1	1	-1	-9	9	-9	9	11	-11	11
$\chi_{14}^{(76)}$	189	-189	-189	189	.	.	.	.	1	-1	-1	1	1	-1	-1	1	9	-9	-9	9	11	-11	-11
$\chi_{14}^{(77)}$	210	210	210	210	.	.	.	.	1	1	1	1	1	1	1	1	-15	-15	-15	-15	10	10	10
$\chi_{14}^{(78)}$	210	210	210	210	.	.	.	.	-1	-1	-1	-1	-1	-1	-1	-1	15	15	15	15	2	2	2
$\chi_{14}^{(79)}$	210	210	-210	-210	.	.	.	.	1	1	-1	-1	1	1	-1	-1	15	15	-15	-15	10	10	-10
$\chi_{14}^{(80)}$	210	210	-210	-210	.	.	.	.	-1	-1	1	1	-1	-1	1	1	-15	-15	15	15	2	2	-2
$\chi_{14}^{(81)}$	210	-210	210	-210	.	.	.	.	1	-1	1	-1	1	-1	1	-1	15	-15	15	-15	-10	10	-10
$\chi_{14}^{(82)}$	210	-210	210	-210	.	.	.	.	-1	1	-1	1	-1	1	-1	1	-15	15	-15	15	-2	2	-2
$\chi_{14}^{(83)}$	210	-210	-210	210	.	.	.	.	1	-1	-1	1	1	-1	-1	1	-15	15	15	-15	-10	10	10
$\chi_{14}^{(84)}$	210	-210	-210	210	.	.	.	.	-1	1	1	-1	-1	1	1	-1	15	-15	-15	15	-2	2	2
$\chi_{14}^{(85)}$	216	216	216	216	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	-9	-9	-9	-9	8	8	8
$\chi_{14}^{(86)}$	216	216	-216	-216	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	9	9	-9	-9	8	8	-8
$\chi_{14}^{(87)}$	216	-216	216	-216	-1	1	-1	1	1	-1	1	-1	-1	1	-1	1	9	-9	9	-9	-8	8	-8
$\chi_{14}^{(88)}$	216	-216	-216	216	1	-1	-1	1	1	-1	-1	1	-1	1	1	-1	-9	9	9	-9	-8	8	8
$\chi_{14}^{(89)}$	280	280	280	280	.	.	.	.	-1	-1	-1	-1	-1	-1	-1	-1	-5	-5	-5	-5	8	8	8
$\chi_{14}^{(90)}$	280	280	-280	-280	.	.	.	.	-1	-1	1	1	-1	-1	1	1	5	5	-5	-5	8	8	-8

	10																20							
$\chi_{14}^{(91)}$	280	-280	280	-280	.	.	.	.	-1	1	-1	1	-1	1	-1	1	5	-5	5	-5	-8	8	-8	
$\chi_{14}^{(92)}$	280	-280	-280	280	.	.	.	.	-1	1	1	-1	-1	1	1	-1	-5	5	5	-5	-8	8	8	
$\chi_{14}^{(93)}$	280	280	280	280	.	.	.	.	.	.	.	.	-2	-2	-2	-2	10	10	10	10	-8	-8	-8	
$\chi_{14}^{(94)}$	280	280	-280	-280	.	.	.	.	.	.	.	.	-2	-2	2	2	-10	-10	10	10	-8	-8	8	
$\chi_{14}^{(95)}$	280	-280	280	-280	.	.	.	.	.	.	.	.	-2	2	-2	2	-10	10	-10	10	8	-8	8	
$\chi_{14}^{(96)}$	280	-280	-280	280	.	.	.	.	.	.	.	.	-2	2	2	-2	10	-10	-10	10	8	-8	-8	
$\chi_{14}^{(97)}$	315	315	315	315	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	3	3	3	
$\chi_{14}^{(98)}$	315	315	-315	-315	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	3	3	-3	
$\chi_{14}^{(99)}$	315	-315	315	-315	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-3	3	-3	
$\chi_{14}^{(100)}$	315	-315	-315	315	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-3	3	3	
$\chi_{14}^{(101)}$	336	336	336	336	.	.	.	.	.	.	.	.	2	2	2	2	6	6	6	6	-16	-16	-16	
$\chi_{14}^{(102)}$	336	336	-336	-336	.	.	.	.	.	.	.	.	2	2	-2	-2	-6	-6	6	6	-16	-16	16	
$\chi_{14}^{(103)}$	336	-336	336	-336	.	.	.	.	.	.	.	.	2	-2	2	-2	-6	6	-6	6	16	-16	16	
$\chi_{14}^{(104)}$	336	-336	-336	336	.	.	.	.	.	.	.	.	2	-2	-2	2	6	-6	-6	6	16	-16	-16	
$\chi_{14}^{(105)}$	378	378	378	378	.	.	.	.	-1	-1	-1	-1	-1	-1	-1	-1	-9	-9	-9	-9	2	2	2	
$\chi_{14}^{(106)}$	378	378	-378	-378	.	.	.	.	-1	-1	1	1	-1	-1	1	1	9	9	-9	-9	2	2	-2	
$\chi_{14}^{(107)}$	378	-378	378	-378	.	.	.	.	-1	1	-1	1	-1	1	-1	1	9	-9	9	-9	-2	2	-2	
$\chi_{14}^{(108)}$	378	-378	-378	378	.	.	.	.	-1	1	1	-1	-1	1	1	-1	-9	9	9	-9	-2	2	2	
$\chi_{14}^{(109)}$	405	405	405	405	-1	-1	-1	-1	.	.	.	.	.	.	.	.	.	.	.	.	-3	-3	-3	
$\chi_{14}^{(110)}$	405	405	-405	-405	1	1	-1	-1	.	.	.	.	.	.	.	.	.	.	.	.	-3	-3	3	
$\chi_{14}^{(111)}$	405	-405	405	-405	-1	1	-1	1	.	.	.	.	.	.	.	.	.	.	.	.	3	-3	3	
$\chi_{14}^{(112)}$	405	-405	-405	405	1	-1	-1	1	.	.	.	.	.	.	.	.	.	.	.	.	3	-3	-3	
$\chi_{14}^{(113)}$	420	420	420	420	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-12	-12	-12	
$\chi_{14}^{(114)}$	420	420	-420	-420	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-12	-12	12	
$\chi_{14}^{(115)}$	420	-420	420	-420	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	12	-12	12	
$\chi_{14}^{(116)}$	420	-420	-420	420	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	12	-12	-12	
$\chi_{14}^{(117)}$	512	512	512	512	1	1	1	1	.	.	.	.	.	.	.	.	-16	-16	-16	-16	.	.	.	
$\chi_{14}^{(118)}$	512	512	-512	-512	-1	-1	1	1	.	.	.	.	.	.	.	.	16	16	-16	-16	.	.	.	
$\chi_{14}^{(119)}$	512	-512	512	-512	1	-1	1	-1	.	.	.	.	.	.	.	.	16	-16	16	-16	.	.	.	
$\chi_{14}^{(120)}$	512	-512	-512	512	-1	1	1	-1	.	.	.	.	.	.	.	.	-16	16	16	-16	.	.	.	
	30																40							
$\chi_{14}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{14}^{(2)}$	-1	1	-1	-1	1	1	-1	-1	1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	-1
$\chi_{14}^{(3)}$	1	-1	1	-1	1	1	-1	1	-1	1	-1	1	-1	-1	1	-1	1	-1	1	-1	1	-1	1	1
$\chi_{14}^{(4)}$	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	-1	-1	1	1	-1	-1	-1	1	1	-1
$\chi_{14}^{(5)}$	3	-3	-3	-3	-3	2	2	2	2	-1	-1	-1	-1	2	2	2	-2	-2	-2	-2	1	1	1	1
$\chi_{14}^{(6)}$	-3	3	3	-3	-3	2	2	-2	-2	1	1	-1	-1	2	2	-2	-2	-2	-2	2	2	-1	-1	-1
$\chi_{14}^{(7)}$	3	3	-3	3	-3	2	-2	2	-2	-1	1	-1	1	-2	2	-2	2	2	-2	2	-2	-1	1	-1
$\chi_{14}^{(8)}$	-3	-3	3	3	-3	2	-2	-2	2	1	-1	-1	1	-2	2	2	-2	2	-2	2	1	-1	-1	-1
$\chi_{14}^{(9)}$	3	1	1	1	1	-2	-2	-2	-2	7	7	7	7	1	1	1	-3	-3	-3	-3	1	1	1	3
$\chi_{14}^{(10)}$	-3	-1	-1	1	1	-2	-2	2	2	-7	-7	7	7	1	1	-1	-1	-3	-3	3	3	-1	-1	-3
$\chi_{14}^{(11)}$	3	-1	1	-1	1	-2	2	-2	2	7	-7	7	-7	-1	1	-1	3	-3	3	-3	-1	1	-1	3
$\chi_{14}^{(12)}$	-3	1	-1	-1	1	-2	2	2	-2	-7	7	7	-7	-1	1	1	-3	-3	-3	3	1	-1	-1	-3
$\chi_{14}^{(13)}$	5	-3	-3	-3	-3	2	2	2	2	5	5	5	5	-1	-1	-1	3	3	3	3	-2	-2	-2	.
$\chi_{14}^{(14)}$	-5	3	3	-3	-3	2	2	-2	-2	-5	-5	5	5	-1	-1	1	3	3	-3	-3	2	2	-2	.
$\chi_{14}^{(15)}$	5	3	-3	3	-3	2	-2	2	-2	5	-5	5	-5	1	-1	1	-3	3	-3	3	2	-2	2	.

	30										40										50									
$\chi_{14}^{(16)}$	-5	-3	3	3	-3	2	-2	-2	2	-5	5	5	-5	1	-1	-1	1	-3	3	3	-3	-2	2	2	-2	.	.			
$\chi_{14}^{(17)}$	1	3	3	3	3	.	.	.	.	-3	-3	-3	-3	3	3	3	3	3	3	3	3	.	.	.	.	.	.
$\chi_{14}^{(18)}$	-1	-3	-3	3	3	.	.	.	.	3	3	-3	-3	3	3	-3	-3	3	3	-3	-3	.	.	.	.	.	.
$\chi_{14}^{(19)}$	1	-3	3	-3	3	.	.	.	.	-3	3	-3	3	-3	3	-3	3	-3	3	-3	3	.	.	.	.	.	.
$\chi_{14}^{(20)}$	-1	3	-3	-3	3	.	.	.	.	3	-3	-3	3	-3	3	3	-3	-3	3	3	-3	.	.	.	.	.	.
$\chi_{14}^{(21)}$	7	5	5	5	5	3	3	3	3	3	3	3	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(22)}$	-7	-5	-5	5	5	3	3	-3	-3	-3	-3	3	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(23)}$	7	-5	5	-5	5	3	-3	3	-3	3	-3	3	-3	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(24)}$	-7	5	-5	-5	5	3	-3	-3	3	-3	3	3	-3	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(25)}$	-5	-1	-1	-1	-1	-3	-3	-3	-3	3	3	3	3	3	3	3	3	-1	-1	-1	-1	-2	-2	-2	-2	2	2			
$\chi_{14}^{(26)}$	7	1	1	1	1	-1	-1	-1	-1	11	11	11	11	-1	-1	-1	-1	-1	-1	-1	-1	.	.	.	.	2	2
$\chi_{14}^{(27)}$	5	1	1	-1	-1	-3	-3	3	3	-3	-3	3	3	3	3	-3	-3	-1	-1	1	1	2	2	-2	-2	-2	-2			
$\chi_{14}^{(28)}$	-7	-1	-1	1	1	-1	-1	1	1	-11	-11	11	11	-1	-1	1	1	-1	-1	1	1	.	.	.	.	-2	-2
$\chi_{14}^{(29)}$	-5	1	-1	1	-1	-3	3	-3	3	3	-3	3	-3	-3	3	-3	3	1	-1	1	-1	2	-2	2	-2	-2	2			
$\chi_{14}^{(30)}$	7	-1	1	-1	1	-1	1	-1	1	11	-11	11	-11	1	-1	1	-1	1	-1	1	-1	.	.	.	.	-2	2
$\chi_{14}^{(31)}$	5	-1	1	1	-1	-3	3	3	-3	-3	3	3	-3	-3	3	3	-3	1	-1	-1	1	-2	2	2	-2	2	-2			
$\chi_{14}^{(32)}$	-7	1	-1	-1	1	-1	1	1	-1	-11	11	11	-11	1	-1	-1	1	1	-1	-1	1	.	.	.	.	2	-2
$\chi_{14}^{(33)}$	8	-4	-4	-4	-4	1	1	1	1	-8	-8	-8	-8	-2	-2	-2	-2	2	2	2	2	.	.	.	.	2	2
$\chi_{14}^{(34)}$	-8	4	4	-4	-4	1	1	-1	-1	8	8	-8	-8	-2	-2	2	2	2	2	-2	-2	.	.	.	.	-2	-2
$\chi_{14}^{(35)}$	8	4	-4	4	-4	1	-1	1	-1	-8	8	-8	8	2	-2	2	-2	-2	2	-2	2	.	.	.	.	-2	2
$\chi_{14}^{(36)}$	-8	-4	4	4	-4	1	-1	-1	1	8	-8	-8	8	2	-2	-2	2	-2	2	2	-2	.	.	.	.	2	-2
$\chi_{14}^{(37)}$	6	2	2	2	2	-1	-1	-1	-1	-10	-10	-10	-10	-1	-1	-1	-1	7	7	7	7	-1	-1	-1	-1	1	1			
$\chi_{14}^{(38)}$	-6	-2	-2	2	2	-1	-1	1	1	10	10	-10	-10	-1	-1	1	1	7	7	-7	-7	1	1	-1	-1	-1	-1			
$\chi_{14}^{(39)}$	6	-2	2	-2	2	-1	1	-1	1	-10	10	-10	10	1	-1	1	-1	-7	7	-7	7	1	-1	1	-1	-1	1			
$\chi_{14}^{(40)}$	-6	2	-2	-2	2	-1	1	1	-1	10	-10	-10	10	1	-1	-1	1	-7	7	7	-7	-1	1	1	-1	1	-1			
$\chi_{14}^{(41)}$	4	.	.	.	.	2	2	2	2	20	20	20	20	-1	-1	-1	-1	3	3	3	3	1	1	1	1	3	3
$\chi_{14}^{(42)}$	-4	.	.	.	.	2	2	-2	-2	-20	-20	20	20	-1	-1	1	1	3	3	-3	-3	-1	-1	1	1	-3	-3
$\chi_{14}^{(43)}$	4	.	.	.	.	2	-2	2	-2	20	-20	20	-20	1	-1	1	-1	-3	3	-3	3	-1	1	-1	1	-3	3
$\chi_{14}^{(44)}$	-4	.	.	.	.	2	-2	-2	2	-20	20	20	-20	1	-1	-1	1	-3	3	3	-3	1	-1	-1	1	3	-3
$\chi_{14}^{(45)}$	5	-5	-5	-5	-5	1	1	1	1	1	1	1	1	1	1	1	1	-3	-3	-3	-3	1	1	1	1	-3	-3			
$\chi_{14}^{(46)}$	-3	-1	-1	-1	-1	2	2	2	2	17	17	17	17	2	2	2	2	6	6	6	6	-1	-1	-1	-1	3	3			
$\chi_{14}^{(47)}$	9	-3	-3	-3	-3	-4	-4	-4	-4	-7	-7	-7	-7	2	2	2	2	6	6	6	6	1	1	1	1	3	3			
$\chi_{14}^{(48)}$	-5	5	5	-5	-5	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-3	-3	3	3	-1	-1	1	1	3	3			
$\chi_{14}^{(49)}$	3	1	1	-1	-1	2	2	-2	-2	-17	-17	17	17	2	2	-2	-2	6	6	-6	-6	1	1	-1	-1	-3	-3			
$\chi_{14}^{(50)}$	-9	3	3	-3	-3	-4	-4	4	4	7	7	-7	-7	2	2	-2	-2	6	6	-6	-6	-1	-1	1	1	-3	-3			
$\chi_{14}^{(51)}$	5	5	-5	5	-5	1	-1	1	-1	1	-1	1	-1	-1	1	-1	1	3	-3	3	-3	-1	1	-1	1	3	-3			
$\chi_{14}^{(52)}$	-3	1	-1	1	-1	2	-2	2	-2	17	-17	17	-17	-2	2	-2	2	-6	6	-6	6	1	-1	1	-1	-3	3			
$\chi_{14}^{(53)}$	9	3	-3	3	-3	-4	4	-4	4	-7	7	-7	7	-2	2	-2	2	-6	6	-6	6	-1	1	-1	1	-3	3			
$\chi_{14}^{(54)}$	-5	-5	5	5	-5	1	-1	-1	1	-1	1	1	-1	-1	1	1	-1	3	-3	-3	3	1	-1	-1	1	-3	3			
$\chi_{14}^{(55)}$	3	-1	1	1	-1	2	-2	-2	2	-17	17	17	-17	-2	2	2	-2	-6	6	6	-6	-1	1	1	-1	3	-3			
$\chi_{14}^{(56)}$	-9	-3	3	3	-3	-4	4	4	-4	7	-7	-7	7	-2	2	2	-2	-6	6	6	-6	1	-1	-1	1	3	-3			
$\chi_{14}^{(57)}$	8	4	4	4	4	1	1	1	1	-8	-8	-8	-8	-2	-2	-2	-2	-6	-6	-6	-6	-2	-2	-2	-2	.	.			
$\chi_{14}^{(58)}$	-8	-4	-4	4	4	1	1	-1	-1	8	8	-8	-8	-2	-2	2	2	-6	-6	6	6	2	2	-2	-2	.	.			
$\chi_{14}^{(59)}$	8	-4	4	-4	4	1	-1	1	-1	-8	8	-8	8	2	-2	2	-2	6	-6	6	-6	2	-2	2	-2	.	.			
$\chi_{14}^{(60)}$	-8	4	-4	-4	4	1	-1	-1	1	8	-8	-8	8	2	-2	-2	2	6	-6	-6	6	-2	2	2	-2	.	.			

	30														40														50					
$\chi_{14}^{(106)}$	-2	-2	-2	2	2	3	3	-3	-3	6	6	-6	-6	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(107)}$	2	-2	2	-2	2	3	-3	3	-3	-6	6	-6	6	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(108)}$	-2	2	-2	-2	2	3	-3	-3	3	6	-6	-6	6	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(109)}$	-3	-3	-3	-3	-3	.	.	.	.	-27	-27	-27	-27	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(110)}$	3	3	3	-3	-3	.	.	.	.	27	27	-27	-27	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(111)}$	-3	3	-3	3	-3	.	.	.	.	-27	27	-27	27	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(112)}$	3	-3	3	3	-3	.	.	.	.	27	-27	-27	27	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(113)}$	-12	.	.	.	.	4	4	4	4	4	4	4	4	1	1	1	1	-3	-3	-3	-3	-1	-1	-1	-1	3	3	3		
$\chi_{14}^{(114)}$	12	.	.	.	.	4	4	-4	-4	-4	-4	4	4	1	1	-1	-1	-3	-3	3	3	1	1	-1	-1	-3	-3	-3		
$\chi_{14}^{(115)}$	-12	.	.	.	.	4	-4	4	-4	4	-4	4	-4	-1	1	-1	1	3	-3	3	-3	1	-1	1	-1	-3	3	3		
$\chi_{14}^{(116)}$	12	.	.	.	.	4	-4	-4	4	-4	4	4	-4	-1	1	1	-1	3	-3	-3	3	-1	1	1	-1	3	-3	-3		
$\chi_{14}^{(117)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	8	8	8	8	.	.	.	.	-4	-4	-4
$\chi_{14}^{(118)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	8	8	-8	-8	.	.	.	.	4	4	4
$\chi_{14}^{(119)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-8	8	-8	8	.	.	.	.	4	-4	-4
$\chi_{14}^{(120)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-8	8	8	-8	.	.	.	.	-4	4	4
	60														70																			
$\chi_{14}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1						
$\chi_{14}^{(2)}$	-1	1	1	-1	-1	1	-1	1	1	-1	-1	1	1	-1	1	-1	-1	1	-1	1	1	-1	-1	1	1	-1	-1	1						
$\chi_{14}^{(3)}$	-1	1	-1	1	-1	1	-1	1	-1	1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1						
$\chi_{14}^{(4)}$	1	1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	-1	-1						
$\chi_{14}^{(5)}$	1	1	-5	-5	-5	-5	-2	-2	-2	-2	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1						
$\chi_{14}^{(6)}$	1	1	5	5	-5	-5	-2	-2	2	2	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1						
$\chi_{14}^{(7)}$	-1	1	5	-5	5	-5	2	-2	2	-2	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1						
$\chi_{14}^{(8)}$	-1	1	-5	5	5	-5	2	-2	-2	2	1	-1	-1	1	-1	1	1	-1	1	-1	-1	-1	1						
$\chi_{14}^{(9)}$	3	3	-5	-5	-5	-5	-2	-2	-2	-2	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1						
$\chi_{14}^{(10)}$	3	3	5	5	-5	-5	-2	-2	2	2	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	1	1						
$\chi_{14}^{(11)}$	-3	3	5	-5	5	-5	2	-2	2	-2	1	-1	1	-1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	-1	1	1						
$\chi_{14}^{(12)}$	-3	3	-5	5	5	-5	2	-2	-2	2	-1	1	1	-1	-1	1	1	-1	1	-1	-1	1	1	-1	1	1	-1	-1						
$\chi_{14}^{(13)}$	.	.	-11	-11	-11	-11	-2	-2	-2	-2	2	2	2	2	.	.	.	.	-3	-3	-3	-3	1	1				
$\chi_{14}^{(14)}$	.	.	11	11	-11	-11	-2	-2	2	2	-2	-2	2	2	.	.	.	.	3	3	-3	-3	-1	-1				
$\chi_{14}^{(15)}$	.	.	11	-11	11	-11	2	-2	2	-2	2	-2	2	-2	.	.	.	.	-3	3	-3	3	1	-1				
$\chi_{14}^{(16)}$	.	.	-11	11	11	-11	2	-2	-2	2	-2	2	2	-2	.	.	.	.	3	-3	-3	3	-1	1				
$\chi_{14}^{(17)}$	.	.	9	9	9	9	.	.	.	.	.	.	.	.	.	.	.	.	-3	-3	-3	-3	-1	-1				
$\chi_{14}^{(18)}$	.	.	-9	-9	9	9	.	.	.	.	.	.	.	.	.	.	.	.	3	3	-3	-3	1	1				
$\chi_{14}^{(19)}$	.	.	-9	9	-9	9	.	.	.	.	.	.	.	.	.	.	.	.	-3	3	-3	3	-1	1				
$\chi_{14}^{(20)}$	.	.	9	-9	-9	9	.	.	.	.	.	.	.	.	.	.	.	.	3	-3	-3	3	1	-1				
$\chi_{14}^{(21)}$	.	.	15	15	15	15	3	3	3	3	.	.	.	.	.	.	.	.	3	3	3	3						
$\chi_{14}^{(22)}$	.	.	-15	-15	15	15	3	3	-3	-3	.	.	.	.	.	.	.	.	-3	-3	3	3						
$\chi_{14}^{(23)}$	.	.	-15	15	-15	15	-3	3	-3	3	.	.	.	.	.	.	.	.	3	-3	3	-3						
$\chi_{14}^{(24)}$	.	.	15	-15	-15	15	-3	3	3	-3	.	.	.	.	.	.	.	.	-3	3	3	-3						
$\chi_{14}^{(25)}$	2	2	-5	-5	-5	-5	1	1	1	1	.	.	.	.	.	.	.	.	3	3	3	3	1	1				
$\chi_{14}^{(26)}$	2	2	15	15	15	15	3	3	3	3	2	2	2	2	.	.	.	.	3	3	3	3	-1	-1				
$\chi_{14}^{(27)}$	2	2	5	5	-5	-5	1	1	-1	-1	.	.	.	.	.	.	.	.	-3	-3	3	3	-1	-1				
$\chi_{14}^{(28)}$	2	2	-15	-15	15	15	3	3	-3	-3	-2	-2	2	2	-3	-3	3	3	1	1						
$\chi_{14}^{(29)}$	-2	2	5	-5	5	-5	-1	1	-1	1	3	-3	3	-3	1	-1						
$\chi_{14}^{(30)}$	-2	2	-15	15	-15	15	-3	3	-3	3	2	-2	2	-2	3	-3	3	-3	-1	1						

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$\chi_{14}^{(31)}$	-2	2	-5	5	5	-5	-1	1	1	-1	-3	3	3	-3	-1	1	
$\chi_{14}^{(32)}$	-2	2	15	-15	-15	15	-3	3	3	-3	-2	2	2	-2	.	.	.	-3	3	3	-3	1	-1	
$\chi_{14}^{(33)}$	2	2	-24	-24	-24	-24	-3	-3	-3	-3	-2	-2	-2	-2	
$\chi_{14}^{(34)}$	2	2	24	24	-24	-24	-3	-3	3	3	2	2	-2	-2	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(35)}$	-2	2	24	-24	24	-24	3	-3	3	-3	-2	2	-2	2	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(36)}$	-2	2	-24	24	24	-24	3	-3	-3	3	2	-2	-2	2	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(37)}$	1	1	-10	-10	-10	-10	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	-2	-2	-2	-2	-1	-1	
$\chi_{14}^{(38)}$	1	1	10	10	-10	-10	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	2	2	-2	-2	1	1
$\chi_{14}^{(39)}$	-1	1	10	-10	10	-10	1	-1	1	-1	-1	1	-1	1	1	-1	1	-1	-2	2	-2	2	-1	1
$\chi_{14}^{(40)}$	-1	1	-10	10	10	-10	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	2	-2	-2	2	1	-1
$\chi_{14}^{(41)}$	3	3	4	4	4	4	-2	-2	-2	-2	-1	-1	-1	-1	1	1	1	1	4	4	4	4	1	1
$\chi_{14}^{(42)}$	3	3	-4	-4	4	4	-2	-2	2	2	1	1	-1	-1	1	1	-1	-1	-4	-4	4	4	-1	-1
$\chi_{14}^{(43)}$	-3	3	-4	4	-4	4	2	-2	2	-2	-1	1	-1	1	1	-1	1	-1	4	-4	4	-4	1	-1
$\chi_{14}^{(44)}$	-3	3	4	-4	-4	4	2	-2	-2	2	1	-1	-1	1	1	-1	-1	1	-4	4	4	-4	-1	1
$\chi_{14}^{(45)}$	-3	-3	-35	-35	-35	-35	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	
$\chi_{14}^{(46)}$	3	3	5	5	5	5	2	2	2	2	-1	-1	-1	-1	-1	-1	-1	-1	-7	-7	-7	-7	.	.
$\chi_{14}^{(47)}$	3	3	25	25	25	25	4	4	4	4	-1	-1	-1	-1	1	1	1	1	1	1	1	.	.	
$\chi_{14}^{(48)}$	-3	-3	35	35	-35	-35	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	
$\chi_{14}^{(49)}$	3	3	-5	-5	5	5	2	2	-2	-2	1	1	-1	-1	-1	-1	1	1	7	7	-7	-7	.	.
$\chi_{14}^{(50)}$	3	3	-25	-25	25	25	4	4	-4	-4	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	.	.
$\chi_{14}^{(51)}$	3	-3	35	-35	35	-35	-1	1	-1	1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	-1	
$\chi_{14}^{(52)}$	-3	3	-5	5	-5	5	-2	2	-2	2	-1	1	-1	1	-1	1	-1	1	-7	7	-7	7	.	.
$\chi_{14}^{(53)}$	-3	3	-25	25	-25	25	-4	4	-4	4	-1	1	-1	1	1	-1	1	-1	1	-1	1	-1	.	.
$\chi_{14}^{(54)}$	3	-3	-35	35	35	-35	-1	1	1	-1	-1	1	1	-1	1	-1	-1	1	-1	1	1	-1	-1	
$\chi_{14}^{(55)}$	-3	3	5	-5	-5	5	-2	2	2	-2	1	-1	-1	1	-1	1	1	-1	7	-7	-7	7	.	.
$\chi_{14}^{(56)}$	-3	3	25	-25	-25	25	-4	4	4	-4	1	-1	-1	1	1	-1	-1	1	-1	1	1	-1	.	.
$\chi_{14}^{(57)}$	.	.	40	40	40	40	1	1	1	1	-2	-2	-2	-2	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(58)}$	.	.	-40	-40	40	40	1	1	-1	-1	2	2	-2	-2	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(59)}$	.	.	-40	40	-40	40	-1	1	-1	1	-2	2	-2	2	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(60)}$	.	.	40	-40	-40	40	-1	1	1	-1	2	-2	-2	2	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(61)}$	-3	-3	40	40	40	40	-2	-2	-2	-2	-1	-1	-1	-1	-1	-1	-1	-1	8	8	8	8	.	.
$\chi_{14}^{(62)}$	-3	-3	-40	-40	40	40	-2	-2	2	2	1	1	-1	-1	-1	-1	1	1	-8	-8	8	8	.	.
$\chi_{14}^{(63)}$	3	-3	-40	40	-40	40	2	-2	2	-2	-1	1	-1	1	-1	1	-1	1	8	-8	8	-8	.	.
$\chi_{14}^{(64)}$	3	-3	40	-40	-40	40	2	-2	-2	2	1	-1	-1	1	-1	1	1	-1	-8	8	8	-8	.	.
$\chi_{14}^{(65)}$	.	.	-51	-51	-51	-51	-3	-3	-3	-3	.	.	.	.	.	.	.	.	-3	-3	-3	-3	.	.
$\chi_{14}^{(66)}$	.	.	-39	-39	-39	-39	3	3	3	3	.	.	.	.	.	.	.	.	-3	-3	-3	-3	.	.
$\chi_{14}^{(67)}$	.	.	51	51	-51	-51	-3	-3	3	3	.	.	.	.	.	.	.	.	3	3	-3	-3	.	.
$\chi_{14}^{(68)}$	.	.	39	39	-39	-39	3	3	-3	-3	.	.	.	.	.	.	.	.	3	3	-3	-3	.	.
$\chi_{14}^{(69)}$	.	.	51	-51	51	-51	3	-3	3	-3	.	.	.	.	.	.	.	.	-3	3	-3	3	.	.
$\chi_{14}^{(70)}$	.	.	39	-39	39	-39	-3	3	-3	3	.	.	.	.	.	.	.	.	-3	3	-3	3	.	.
$\chi_{14}^{(71)}$	.	.	-51	51	51	-51	3	-3	-3	3	.	.	.	.	.	.	.	.	3	-3	-3	3	.	.
$\chi_{14}^{(72)}$	.	.	-39	39	39	-39	-3	3	3	-3	.	.	.	.	.	.	.	.	3	-3	-3	3	.	.
$\chi_{14}^{(73)}$.	.	21	21	21	21	-3	-3	-3	-3	-3	-3	-3	-3	.	.
$\chi_{14}^{(74)}$.	.	-21	-21	21	21	-3	-3	3	3	3	3	-3	-3	.	.
$\chi_{14}^{(75)}$.	.	-21	21	-21	21	3	-3	3	-3	-3	3	-3	3	.	.

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$\chi_{14}^{(76)}$.	.	21	-21	-21	21	3	-3	-3	3	3	-3	-3	3	.	.			
$\chi_{14}^{(77)}$	3	3	10	10	10	10	1	1	1	1	1	1	1	-1	-1	-1	-1	2	2	2	2	.	.			
$\chi_{14}^{(78)}$.	.	50	50	50	50	-1	-1	-1	-1	2	2	2	2	.	.	.	-6	-6	-6	-6	1	1			
$\chi_{14}^{(79)}$	3	3	-10	-10	10	10	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	-2	-2	2	2	.	.		
$\chi_{14}^{(80)}$	.	.	-50	-50	50	50	-1	-1	1	1	-2	-2	2	2	.	.	.	6	6	-6	-6	-1	-1		
$\chi_{14}^{(81)}$	-3	3	-10	10	-10	10	-1	1	-1	1	1	-1	1	-1	-1	1	-1	1	2	-2	2	-2	.	.		
$\chi_{14}^{(82)}$	.	.	-50	50	-50	50	1	-1	1	-1	2	-2	2	-2	.	.	.	-6	6	-6	6	1	-1		
$\chi_{14}^{(83)}$	-3	3	10	-10	-10	10	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-2	2	2	-2	.	.		
$\chi_{14}^{(84)}$	.	.	50	-50	-50	50	1	-1	-1	1	-2	2	2	-2	.	.	.	6	-6	-6	6	-1	1		
$\chi_{14}^{(85)}$	.	.	-24	-24	-24	-24	-3	-3	-3	-3	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(86)}$	.	.	24	24	-24	-24	-3	-3	3	3	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(87)}$	.	.	24	-24	24	-24	3	-3	3	-3	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(88)}$	.	.	-24	24	24	-24	3	-3	-3	3	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(89)}$	-2	-2	40	40	40	40	1	1	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(90)}$	-2	-2	-40	-40	40	40	1	1	-1	-1	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(91)}$	2	-2	-40	40	-40	40	-1	1	-1	1	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(92)}$	2	-2	40	-40	-40	40	-1	1	1	-1	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(93)}$	1	1	-40	-40	-40	-40	2	2	2	2	1	1	1	1	-1	-1	-1	-1	8	8	8	8	.	.		
$\chi_{14}^{(94)}$	1	1	40	40	-40	-40	2	2	-2	-2	-1	-1	1	1	-1	-1	1	1	-8	-8	8	8	.	.		
$\chi_{14}^{(95)}$	-1	1	40	-40	40	-40	-2	2	-2	2	1	-1	1	-1	-1	1	-1	1	8	-8	8	-8	.	.		
$\chi_{14}^{(96)}$	-1	1	-40	40	40	-40	-2	2	2	-2	-1	1	1	-1	-1	1	1	-1	-8	8	8	-8	.	.		
$\chi_{14}^{(97)}$	.	.	-45	-45	-45	-45	.	.	.	.	.	.	.	.	.	.	.	3	3	3	3	1	1
$\chi_{14}^{(98)}$	.	.	45	45	-45	-45	.	.	.	.	.	.	.	.	.	.	.	-3	-3	3	3	-1	-1
$\chi_{14}^{(99)}$	.	.	45	-45	45	-45	.	.	.	.	.	.	.	.	.	.	.	3	-3	3	-3	1	-1
$\chi_{14}^{(100)}$	.	.	-45	45	45	-45	.	.	.	.	.	.	.	.	.	.	.	-3	3	3	-3	-1	1
$\chi_{14}^{(101)}$	.	.	-16	-16	-16	-16	2	2	2	2	-2	-2	-2	-2	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(102)}$	.	.	16	16	-16	-16	2	2	-2	-2	2	2	-2	-2	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(103)}$	.	.	16	-16	16	-16	-2	2	-2	2	-2	2	-2	2	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(104)}$	.	.	-16	16	16	-16	-2	2	2	-2	2	-2	-2	2	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(105)}$	.	.	-30	-30	-30	-30	3	3	3	3	.	.	.	.	.	.	.	-6	-6	-6	-6	.	.
$\chi_{14}^{(106)}$	.	.	30	30	-30	-30	3	3	-3	-3	.	.	.	.	.	.	.	6	6	-6	-6	.	.
$\chi_{14}^{(107)}$	.	.	30	-30	30	-30	-3	3	-3	3	.	.	.	.	.	.	.	-6	6	-6	6	.	.
$\chi_{14}^{(108)}$	.	.	-30	30	30	-30	-3	3	3	-3	.	.	.	.	.	.	.	6	-6	-6	6	.	.
$\chi_{14}^{(109)}$	.	.	45	45	45	45	.	.	.	.	.	.	.	.	.	.	.	-3	-3	-3	-3	.	.
$\chi_{14}^{(110)}$	.	.	-45	-45	45	45	.	.	.	.	.	.	.	.	.	.	.	3	3	-3	-3	.	.
$\chi_{14}^{(111)}$	.	.	-45	45	-45	45	.	.	.	.	.	.	.	.	.	.	.	-3	3	-3	3	.	.
$\chi_{14}^{(112)}$	.	.	45	-45	-45	45	.	.	.	.	.	.	.	.	.	.	.	3	-3	-3	3	.	.
$\chi_{14}^{(113)}$	3	3	20	20	20	20	-4	-4	-4	-4	1	1	1	1	1	1	1	4	4	4	4	-1	-1			
$\chi_{14}^{(114)}$	3	3	-20	-20	20	20	-4	-4	4	4	-1	-1	1	1	1	1	-1	-1	-4	-4	4	4	1	1		
$\chi_{14}^{(115)}$	-3	3	-20	20	-20	20	4	-4	4	-4	1	-1	1	-1	1	-1	1	-1	4	-4	4	-4	-1	1		
$\chi_{14}^{(116)}$	-3	3	20	-20	-20	20	4	-4	-4	4	-1	1	1	-1	1	-1	-1	1	-4	4	4	-4	1	-1		
$\chi_{14}^{(117)}$	-4	-4			
$\chi_{14}^{(118)}$	-4	-4			
$\chi_{14}^{(119)}$	4	-4			
$\chi_{14}^{(120)}$	4	-4			

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$\chi_{14}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
$\chi_{14}^{(2)}$	1	-1	1	-1	-1	1	1	-1	-1	1	-1	1	1	-1	-1	1	1	-1	1	-1	-1	1	1	-1	-1
$\chi_{14}^{(3)}$	1	-1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	1	-1	1	-1	1	-1	1
$\chi_{14}^{(4)}$	1	1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1
$\chi_{14}^{(5)}$	.	.	3	3	3	3	1	1	1	1	2	2	2	2	.	.	.	.	1	1	1	1	-2	-2	-2
$\chi_{14}^{(6)}$	.	.	-3	-3	3	3	-1	-1	1	1	2	2	-2	-2	.	.	.	.	1	1	-1	-1	-2	-2	2
$\chi_{14}^{(7)}$	.	.	-3	3	-3	3	-1	1	-1	1	-2	2	-2	2	.	.	.	.	1	-1	1	-1	-2	2	-2
$\chi_{14}^{(8)}$	.	.	3	-3	-3	3	1	-1	-1	1	-2	2	2	-2	.	.	.	.	1	-1	-1	1	-2	2	2
$\chi_{14}^{(9)}$	-1	-1	-1	-1	-1	-1	1	1	1	1	.	.	.	.	.	.	.	.	-3	-3	-3	-3	.	.	.
$\chi_{14}^{(10)}$	-1	-1	1	1	-1	-1	-1	-1	1	1	.	.	.	.	.	.	.	.	-3	-3	3	3	.	.	.
$\chi_{14}^{(11)}$	-1	1	1	-1	1	-1	-1	1	-1	1	.	.	.	.	.	.	.	.	-3	3	-3	3	.	.	.
$\chi_{14}^{(12)}$	-1	1	-1	1	1	-1	1	-1	-1	1	.	.	.	.	.	.	.	.	-3	3	3	-3	.	.	.
$\chi_{14}^{(13)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-3	-3	-3	-3	.	.	.
$\chi_{14}^{(14)}$	1	1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	-3	-3	3	3	.	.	.
$\chi_{14}^{(15)}$	1	-1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	1	-1	1	-1	-3	3	-3	3	.	.	.
$\chi_{14}^{(16)}$	1	-1	1	-1	-1	1	1	-1	-1	1	-1	1	1	-1	1	-1	-1	1	-3	3	3	-3	.	.	.
$\chi_{14}^{(17)}$	-1	-1	5	5	5	5	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	2	2	2
$\chi_{14}^{(18)}$	-1	-1	-5	-5	5	5	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	2	2	-2
$\chi_{14}^{(19)}$	-1	1	-5	5	-5	5	1	-1	1	-1	-1	1	-1	1	1	-1	1	-1	-1	1	-1	1	2	-2	2
$\chi_{14}^{(20)}$	-1	1	5	-5	-5	5	-1	1	1	-1	-1	1	1	-1	1	-1	-1	1	-1	1	1	-1	2	-2	-2
$\chi_{14}^{(21)}$	.	.	3	3	3	3	1	1	1	1	2	2	2	2	.	.	.	.	1	1	1	1	1	1	1
$\chi_{14}^{(22)}$	.	.	-3	-3	3	3	-1	-1	1	1	2	2	-2	-2	.	.	.	.	1	1	-1	-1	1	1	-1
$\chi_{14}^{(23)}$	.	.	-3	3	-3	3	-1	1	-1	1	-2	2	-2	2	.	.	.	.	1	-1	1	-1	1	-1	1
$\chi_{14}^{(24)}$	.	.	3	-3	-3	3	1	-1	-1	1	-2	2	2	-2	.	.	.	.	1	-1	-1	1	1	-1	-1
$\chi_{14}^{(25)}$	1	1	7	7	7	7	-1	-1	-1	-1	.	.	.	.	.	.	.	.	-1	-1	-1	-1	-1	-1	-1
$\chi_{14}^{(26)}$	-1	-1	-1	-1	-1	-1	1	1	1	1	.	.	.	.	.	.	.	.	5	5	5	5	-1	-1	-1
$\chi_{14}^{(27)}$	1	1	-7	-7	7	7	1	1	-1	-1	.	.	.	.	.	.	.	.	-1	-1	1	1	-1	-1	1
$\chi_{14}^{(28)}$	-1	-1	1	1	-1	-1	-1	-1	1	1	.	.	.	.	.	.	.	.	5	5	-5	-5	-1	-1	1
$\chi_{14}^{(29)}$	1	-1	-7	7	-7	7	1	-1	1	-1	.	.	.	.	.	.	.	.	-1	1	-1	1	-1	1	-1
$\chi_{14}^{(30)}$	-1	1	1	-1	1	-1	-1	1	-1	1	.	.	.	.	.	.	.	.	5	-5	5	-5	-1	1	-1
$\chi_{14}^{(31)}$	1	-1	7	-7	-7	7	-1	1	1	-1	.	.	.	.	.	.	.	.	-1	1	1	-1	-1	1	1
$\chi_{14}^{(32)}$	-1	1	-1	1	1	-1	1	-1	-1	1	.	.	.	.	.	.	.	.	5	-5	-5	5	-1	1	1
$\chi_{14}^{(33)}$	.	.	.	.	.	.	.	.	.	.	1	1	1	1	1	1	1	1	4	4	4	4	1	1	1
$\chi_{14}^{(34)}$	.	.	.	.	.	.	.	.	.	.	1	1	-1	-1	1	1	-1	-1	4	4	-4	-4	1	1	-1
$\chi_{14}^{(35)}$	.	.	.	.	.	.	.	.	.	.	-1	1	-1	1	-1	1	-1	1	4	-4	4	-4	1	-1	1
$\chi_{14}^{(36)}$	.	.	.	.	.	.	.	.	.	.	-1	1	1	-1	-1	1	1	-1	4	-4	-4	4	1	-1	-1
$\chi_{14}^{(37)}$	-1	-1	2	2	2	2	-2	-2	-2	-2	.	.	.	.	.	.	.	.	2	2	2	2	-1	-1	-1
$\chi_{14}^{(38)}$	-1	-1	-2	-2	2	2	2	2	-2	-2	.	.	.	.	.	.	.	.	2	2	-2	-2	-1	-1	1
$\chi_{14}^{(39)}$	-1	1	-2	2	-2	2	2	-2	2	-2	.	.	.	.	.	.	.	.	2	-2	2	-2	-1	1	-1
$\chi_{14}^{(40)}$	-1	1	2	-2	-2	2	-2	2	2	-2	.	.	.	.	.	.	.	.	2	-2	-2	2	-1	1	1
$\chi_{14}^{(41)}$	1	1	4	4	4	4	.	.	.	.	-1	-1	-1	-1	-1	-1	-1	.	.	.	.	.	.	.
$\chi_{14}^{(42)}$	1	1	-4	-4	4	4	.	.	.	.	-1	-1	1	1	-1	-1	1	1	.	.	.	.	.	.
$\chi_{14}^{(43)}$	1	-1	-4	4	-4	4	1	-1	1	-1	1	-1	1	-1	
$\chi_{14}^{(44)}$	1	-1	4	-4	-4	4	1	-1	-1	1	1	-1	-1	1	
$\chi_{14}^{(45)}$	-1	-1	5	5	5	5	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1

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$\chi_{14}^{(46)}$.	.	-3	-3	-3	-3	-1	-1	-1	-1	3	3	3	3	.	.	.
$\chi_{14}^{(47)}$.	.	-3	-3	-3	-3	1	1	1	1	-3	-3	-3	-3	.	.	.
$\chi_{14}^{(48)}$	-1	-1	-5	-5	5	5	1	1	-1	-1	-1	-1	1	1	-1	-1	1
$\chi_{14}^{(49)}$.	.	3	3	-3	-3	1	1	-1	-1	3	3	-3	-3	.	.	.
$\chi_{14}^{(50)}$.	.	3	3	-3	-3	-1	-1	1	1	.	.	.	.	.	.	.	-3	-3	3	3	.	.	.
$\chi_{14}^{(51)}$	-1	1	-5	5	-5	5	1	-1	1	-1	.	.	.	.	.	.	.	-1	1	-1	1	-1	1	-1
$\chi_{14}^{(52)}$.	.	3	-3	3	-3	1	-1	1	-1	.	.	.	.	.	.	.	3	-3	3	-3	.	.	.
$\chi_{14}^{(53)}$.	.	3	-3	3	-3	-1	1	-1	1	.	.	.	.	.	.	.	-3	3	-3	3	.	.	.
$\chi_{14}^{(54)}$	-1	1	5	-5	-5	5	-1	1	1	-1	.	.	.	.	.	.	.	-1	1	1	-1	-1	1	1
$\chi_{14}^{(55)}$.	.	-3	3	3	-3	-1	1	1	-1	.	.	.	.	.	.	.	3	-3	-3	3	.	.	.
$\chi_{14}^{(56)}$.	.	-3	3	3	-3	1	-1	-1	1	.	.	.	.	.	.	.	-3	3	3	-3	.	.	.
$\chi_{14}^{(57)}$	-4	-4	-4	-4	-1	-1	-1
$\chi_{14}^{(58)}$	-4	-4	4	4	-1	-1	1
$\chi_{14}^{(59)}$	-4	4	-4	4	-1	1	-1
$\chi_{14}^{(60)}$	-4	4	4	-4	-1	1	1
$\chi_{14}^{(61)}$	-2	-2	-2	-2	.	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(62)}$	-2	-2	2	2	.	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(63)}$	2	-2	2	-2	.	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(64)}$	2	-2	-2	2	.	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(65)}$.	.	-3	-3	-3	-3	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1
$\chi_{14}^{(66)}$.	.	-3	-3	-3	-3	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	-5	-5	-5	-5	1	1	1
$\chi_{14}^{(67)}$.	.	3	3	-3	-3	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	1	-1	-1	1	1	-1
$\chi_{14}^{(68)}$.	.	3	3	-3	-3	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-5	-5	5	5	1	1
$\chi_{14}^{(69)}$.	.	3	-3	3	-3	-1	1	-1	1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	1
$\chi_{14}^{(70)}$.	.	3	-3	3	-3	1	-1	1	-1	1	-1	1	-1	1	-1	1	-5	5	-5	5	1	-1	1
$\chi_{14}^{(71)}$.	.	-3	3	3	-3	1	-1	-1	1	1	-1	-1	1	1	-1	1	1	-1	-1	1	1	-1	-1
$\chi_{14}^{(72)}$.	.	-3	3	3	-3	-1	1	1	-1	1	-1	-1	1	1	-1	-1	-5	5	5	-5	1	-1	-1
$\chi_{14}^{(73)}$.	.	9	9	9	9	1	1	1	1	-1	-1	-1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{14}^{(74)}$.	.	-9	-9	9	9	-1	-1	1	1	-1	-1	1	1	1	-1	-1	1	1	-1	-1	1	1	-1
$\chi_{14}^{(75)}$.	.	-9	9	-9	9	-1	1	-1	1	1	-1	1	-1	1	-1	1	1	-1	1	-1	1	-1	1
$\chi_{14}^{(76)}$.	.	9	-9	-9	9	1	-1	-1	1	1	-1	-1	1	1	-1	1	-1	-1	-1	1	1	-1	-1
$\chi_{14}^{(77)}$.	.	6	6	6	6	-2	-2	-2	-2	.	.	.	.	.	.	.	-2	-2	-2	-2	1	1	1
$\chi_{14}^{(78)}$	1	1	-2	-2	-2	-2	-2	-2	-2	-2	.	.	.	.	.	.	.	2	2	2	2	-1	-1	-1
$\chi_{14}^{(79)}$.	.	-6	-6	6	6	2	2	-2	-2	.	.	.	.	.	.	.	-2	-2	2	2	1	1	-1
$\chi_{14}^{(80)}$	1	1	2	2	-2	-2	2	2	-2	-2	.	.	.	.	.	.	.	2	2	-2	-2	-1	-1	1
$\chi_{14}^{(81)}$.	.	-6	6	-6	6	2	-2	2	-2	.	.	.	.	.	.	.	-2	2	-2	2	1	-1	1
$\chi_{14}^{(82)}$	1	-1	2	-2	2	-2	2	-2	2	-2	.	.	.	.	.	.	.	2	-2	2	-2	-1	1	-1
$\chi_{14}^{(83)}$.	.	6	-6	-6	6	-2	2	2	-2	.	.	.	.	.	.	.	-2	2	2	-2	1	-1	-1
$\chi_{14}^{(84)}$	1	-1	-2	2	2	-2	-2	2	2	-2	.	.	.	.	.	.	.	2	-2	-2	2	-1	1	1
$\chi_{14}^{(85)}$	1	1	1	1	1	1	1	-4	-4	-4	-4	-1	-1	-1
$\chi_{14}^{(86)}$	1	1	-1	-1	1	1	-1	-1	-4	-4	4	4	-1	1
$\chi_{14}^{(87)}$	-1	1	-1	1	-1	1	-1	1	-4	4	-4	4	-1	-1
$\chi_{14}^{(88)}$	-1	1	1	-1	-1	1	1	-1	-4	4	4	-4	-1	1
$\chi_{14}^{(89)}$	4	4	4	4	1	1	1
$\chi_{14}^{(90)}$	4	4	-4	-4	1	1	-1

	80										90																			
$\chi_{14}^{(91)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	4	-4	4	-4	1	-1	1	
$\chi_{14}^{(92)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	4	-4	-4	4	1	-1	-1	
$\chi_{14}^{(93)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(94)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(95)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(96)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(97)}$	1	1	-5	-5	-5	-5	-1	-1	-1	-1	.	.	.	.	.	.	.	3	3	3	3	.	.	.	
$\chi_{14}^{(98)}$	1	1	5	5	-5	-5	1	1	-1	-1	.	.	.	.	.	.	.	3	3	-3	-3	.	.	.	
$\chi_{14}^{(99)}$	1	-1	5	-5	5	-5	1	-1	1	-1	.	.	.	.	.	.	.	3	-3	3	-3	.	.	.	
$\chi_{14}^{(100)}$	1	-1	-5	5	5	-5	-1	1	1	-1	.	.	.	.	.	.	.	3	-3	-3	3	.	.	.	
$\chi_{14}^{(101)}$	.	.	.	.	.	.	.	.	.	.	1	1	1	1	-1	-1	-1	-1						
$\chi_{14}^{(102)}$	.	.	.	.	.	.	.	.	.	.	1	1	-1	-1	-1	-1	1	1						
$\chi_{14}^{(103)}$	.	.	.	.	.	.	.	.	.	.	-1	1	-1	1	1	-1	1	-1						
$\chi_{14}^{(104)}$	.	.	.	.	.	.	.	.	.	.	-1	1	1	-1	1	-1	-1	1						
$\chi_{14}^{(105)}$	.	.	6	6	6	6	2	2	2	2	-2	-2	-2	-2	.	.	.	.	2	2	2	2	-1	-1	-1
$\chi_{14}^{(106)}$	.	.	-6	-6	6	6	-2	-2	2	2	-2	-2	2	2	.	.	.	.	2	2	-2	-2	-1	-1	1
$\chi_{14}^{(107)}$	.	.	-6	6	-6	6	-2	2	-2	2	2	-2	2	-2	.	.	.	.	2	-2	2	-2	-1	1	-1
$\chi_{14}^{(108)}$	.	.	6	-6	-6	6	2	-2	-2	2	2	-2	-2	2	.	.	.	.	2	-2	-2	2	-1	1	1
$\chi_{14}^{(109)}$	.	.	-3	-3	-3	-3	1	1	1	1	.	.	.	.	.	.	.	.	-3	-3	-3	-3	.	.	.
$\chi_{14}^{(110)}$	.	.	3	3	-3	-3	-1	-1	1	1	.	.	.	.	.	.	.	.	-3	-3	3	3	.	.	.
$\chi_{14}^{(111)}$	.	.	3	-3	3	-3	-1	1	-1	1	.	.	.	.	.	.	.	.	-3	3	-3	3	.	.	.
$\chi_{14}^{(112)}$	.	.	-3	3	3	-3	1	-1	-1	1	.	.	.	.	.	.	.	.	-3	3	3	-3	.	.	.
$\chi_{14}^{(113)}$	-1	-1	-4	-4	-4	-4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(114)}$	-1	-1	4	4	-4	-4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(115)}$	-1	1	4	-4	4	-4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(116)}$	-1	1	-4	4	4	-4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(117)}$	.	.	.	.	.	.	.	.	.	.	2	2	2	2	.	.	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(118)}$	.	.	.	.	.	.	.	.	.	.	2	2	-2	-2	.	.	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(119)}$	.	.	.	.	.	.	.	.	.	.	-2	2	-2	2	.	.	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(120)}$	.	.	.	.	.	.	.	.	.	.	-2	2	2	-2	.	.	.	.	.	.	.	.	.	.	.
	100										110										120									
$\chi_{14}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
$\chi_{14}^{(2)}$	1	-1	1	1	-1	1	-1	-1	1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	1	-1	1	-1					
$\chi_{14}^{(3)}$	-1	1	-1	1	-1	-1	1	-1	1	1	-1	1	-1	1	-1	1	-1	-1	1	-1	1	-1	1	1	1					
$\chi_{14}^{(4)}$	-1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	1	-1	-1	-1					
$\chi_{14}^{(5)}$	-2	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1					
$\chi_{14}^{(6)}$	2	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	1	1	1	1					
$\chi_{14}^{(7)}$	2	1	-1	1	-1	1	-1	1	-1	-1	1	-1	1	1	-1	1	-1	1	-1	1	-1	1	-1	-1	-1					
$\chi_{14}^{(8)}$	-2	-1	1	1	-1	-1	1	1	-1	1	-1	-1	1	-1	1	1	-1	1	-1	-1	-1	1	1	1	1					
$\chi_{14}^{(9)}$	.	-1	-1	-1	-1	3	3	3	3	.	.	.	.	.	.	.	.	1	1	1	1	1	1	1	1
$\chi_{14}^{(10)}$	.	1	1	-1	-1	-3	-3	3	3	.	.	.	.	.	.	.	.	1	1	-1	-1	-1	-1	-1	-1
$\chi_{14}^{(11)}$	.	-1	1	-1	1	-3	3	-3	3	.	.	.	.	.	.	.	.	-1	1	-1	1	1	1	1	1
$\chi_{14}^{(12)}$	.	1	-1	-1	1	3	-3	-3	3	.	.	.	.	.	.	.	.	-1	1	1	-1	-1	-1	-1	-1
$\chi_{14}^{(13)}$	.	-1	-1	-1	-1	1	1	1	1	1	1	1	1	.	.	.	.	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_{14}^{(14)}$	.	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	.	.	.	.	-1	-1	1	1	1	1	1	1
$\chi_{14}^{(15)}$	.	-1	1	-1	1	-1	1	-1	1	1	-1	1	-1	.	.	.	.	1	-1	1	-1	-1	-1	-1	-1

	100	110										120									
$\chi_{14}^{(106)}$	1	.	.	.	.	2	2	-2	-2	-1	-1	1	1	.	.	.	.	.	.	.	.
$\chi_{14}^{(107)}$	1	.	.	.	.	2	-2	2	-2	1	-1	1	-1	.	.	.	.	.	.	.	.
$\chi_{14}^{(108)}$	-1	.	.	.	.	-2	2	2	-2	-1	1	1	-1	.	.	.	.	.	.	.	.
$\chi_{14}^{(109)}$.	1	1	1	1	5	5	5	5	.	.	.	.	.	.	.	.	1	1	1	1
$\chi_{14}^{(110)}$.	-1	-1	1	1	-5	-5	5	5	.	.	.	.	.	.	.	.	1	1	-1	-1
$\chi_{14}^{(111)}$.	1	-1	1	-1	-5	5	-5	5	.	.	.	.	.	.	.	.	-1	1	-1	1
$\chi_{14}^{(112)}$.	-1	1	1	-1	5	-5	-5	5	.	.	.	.	.	.	.	.	-1	1	1	-1
$\chi_{14}^{(113)}$	-4	-4	-4	-4	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(114)}$	4	4	-4	-4	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(115)}$	4	-4	4	-4	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(116)}$	-4	4	4	-4	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{14}^{(117)}$	-1	-1	-1	-1	-1	-1	-1	-1	.	.	.	.
$\chi_{14}^{(118)}$	1	1	-1	-1	1	1	-1	-1	.	.	.	.
$\chi_{14}^{(119)}$	-1	1	-1	1	-1	1	-1	1	.	.	.	.
$\chi_{14}^{(120)}$	1	-1	-1	1	1	-1	-1	1	.	.	.	.

The generators of $G^{s_{15}}$ are:

$$\begin{pmatrix} 0 & 1 & 0 & 0 & 0 & 0 & 0 & -1 \\ 1 & 1 & -1 & 1 & -1 & 0 & 1 & -2 \\ 0 & 1 & 0 & 1 & -1 & 0 & 1 & -3 \\ 1 & 1 & -1 & 2 & -2 & 1 & 1 & -4 \\ 1 & 1 & -1 & 1 & -1 & 1 & 1 & -4 \\ 0 & 1 & -1 & 1 & -1 & 1 & 1 & -3 \\ 0 & 1 & 0 & 0 & -1 & 1 & 1 & -2 \\ 0 & 1 & 0 & 0 & -1 & 1 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 1 & -1 & 1 & -1 & 0 & 0 \\ 0 & 1 & 2 & -2 & 2 & -2 & 0 & 0 \\ 0 & 0 & 3 & -2 & 2 & -2 & 0 & 0 \\ 0 & 0 & 4 & -3 & 4 & -4 & 0 & 0 \\ 0 & 0 & 3 & -3 & 4 & -3 & 0 & 0 \\ 0 & 0 & 3 & -3 & 3 & -2 & 0 & 0 \\ 0 & 0 & 2 & -2 & 2 & -2 & 1 & 0 \\ 0 & 0 & 1 & -1 & 1 & -1 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 1 & -1 & 1 & -1 & 0 & 0 \\ 0 & 1 & 2 & -2 & 2 & -2 & 0 & 0 \\ 0 & 0 & 3 & -2 & 2 & -2 & 0 & 0 \\ 0 & 0 & 4 & -3 & 4 & -4 & 0 & 0 \\ 0 & 0 & 3 & -2 & 3 & -3 & -1 & 1 \\ 0 & 0 & 3 & -2 & 2 & -2 & -1 & 1 \\ 0 & 0 & 2 & -1 & 1 & -2 & 0 & 1 \\ 0 & 0 & 1 & -1 & 1 & -1 & 0 & 1 \end{pmatrix}, \\
\begin{pmatrix} 0 & -1 & 0 & 1 & -1 & 1 & 0 & 0 \\ -1 & 0 & 0 & 1 & -1 & 1 & 0 & 0 \\ -1 & -1 & 1 & 1 & -1 & 1 & 0 & 0 \\ -1 & -1 & 0 & 2 & -1 & 1 & 0 & 0 \\ -1 & -1 & 0 & 2 & -1 & 1 & -1 & 1 \\ 0 & 0 & 0 & 1 & -1 & 1 & -1 & 1 \\ 0 & 0 & 0 & 1 & -1 & 0 & 0 & 1 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 1 & -1 & 1 & -1 & -1 & 1 \\ 0 & 1 & 2 & -2 & 2 & -2 & -1 & 1 \\ 0 & 0 & 3 & -2 & 2 & -2 & -2 & 2 \\ 0 & 0 & 4 & -3 & 4 & -4 & -2 & 2 \\ 0 & 0 & 3 & -3 & 4 & -3 & -2 & 2 \\ 0 & 0 & 3 & -3 & 3 & -2 & -1 & 1 \\ 0 & 0 & 2 & -2 & 2 & -2 & 0 & 1 \\ 0 & 0 & 1 & -1 & 1 & -1 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 1 & -1 & 1 & -1 & 2 & -1 \\ 0 & -1 & 2 & -2 & 1 & 0 & 2 & -2 \\ 0 & -2 & 3 & -2 & 1 & -1 & 3 & -2 \\ 0 & -2 & 4 & -3 & 1 & -1 & 5 & -4 \\ 1 & -1 & 3 & -3 & 1 & -1 & 4 & -3 \\ 1 & -1 & 2 & -2 & 1 & -1 & 3 & -2 \\ 1 & -1 & 1 & -1 & 1 & -1 & 2 & -2 \\ 1 & -1 & 0 & 0 & 0 & 0 & 1 & -1 \end{pmatrix}, \\
\begin{pmatrix} 1 & 1 & 1 & -2 & 1 & -1 & 1 & 0 \\ 0 & 2 & 2 & -3 & 2 & -2 & 1 & 0 \\ 0 & 2 & 3 & -4 & 2 & -2 & 2 & 0 \\ 0 & 3 & 4 & -6 & 4 & -4 & 3 & 0 \\ 0 & 2 & 3 & -5 & 4 & -3 & 2 & 0 \\ 0 & 1 & 3 & -4 & 3 & -2 & 1 & 0 \\ 0 & 0 & 2 & -2 & 2 & -2 & 1 & 0 \\ 0 & 0 & 1 & -1 & 1 & -1 & 0 & 1 \end{pmatrix}.$$

The representatives of conjugacy classes of $G^{s_{15}}$ are:

[illegible]

$$\begin{pmatrix} 0 & -1 & -1 & 2 & -2 & 1 & 0 & 1 \\ 0 & -1 & -1 & 2 & -3 & 3 & -1 & 1 \\ 0 & -2 & -1 & 3 & -4 & 3 & -1 & 2 \\ 0 & -2 & -2 & 4 & -6 & 5 & -1 & 2 \\ 0 & -2 & -1 & 3 & -5 & 4 & 0 & 1 \\ 0 & -2 & -1 & 2 & -3 & 3 & 0 & 1 \\ 0 & -2 & -1 & 2 & -2 & 2 & 0 & 0 \\ 1 & -1 & -1 & 1 & -1 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 0 & 1 & -2 & 2 & -1 & 1 \\ -1 & 0 & -1 & 2 & -3 & 3 & -1 & 0 \\ -2 & 0 & 0 & 2 & -4 & 4 & -2 & 1 \\ -2 & 0 & -1 & 3 & -6 & 6 & -2 & 1 \\ -2 & 0 & 0 & 2 & -5 & 5 & -1 & 0 \\ -2 & 0 & 0 & 1 & -3 & 4 & -1 & 0 \\ -1 & -1 & 0 & 1 & -2 & 3 & -1 & 0 \\ 0 & 0 & 0 & 0 & -1 & 2 & -1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 0 & -1 & 2 & -2 & 1 & 0 & 0 \\ 0 & -1 & -2 & 3 & -3 & 2 & 0 & 0 \\ -1 & -1 & -2 & 4 & -4 & 2 & 0 & 0 \\ -1 & -1 & -3 & 5 & -6 & 4 & 0 & 0 \\ -1 & -1 & -2 & 4 & -5 & 3 & 1 & -1 \\ -1 & -1 & -2 & 3 & -3 & 2 & 1 & -1 \\ -1 & -1 & -1 & 2 & -2 & 2 & 0 & -1 \\ 0 & 0 & -1 & 1 & -1 & 1 & 0 & -1 \end{pmatrix}, \\
\begin{pmatrix} 1 & 0 & 0 & -1 & 2 & -2 & 1 & -1 \\ 2 & 0 & 1 & -2 & 2 & -2 & 1 & -1 \\ 3 & 0 & 0 & -2 & 3 & -3 & 2 & -2 \\ 4 & 0 & 1 & -3 & 4 & -4 & 2 & -3 \\ 4 & 0 & 0 & -2 & 3 & -3 & 1 & -2 \\ 3 & 0 & 0 & -1 & 2 & -3 & 1 & -1 \\ 2 & 1 & 0 & -1 & 1 & -2 & 1 & -1 \\ 1 & 0 & 0 & 0 & 0 & -1 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 1 & -2 & 2 & -1 & 0 & 0 \\ 1 & 1 & 2 & -3 & 2 & -1 & 0 & -1 \\ 2 & 1 & 2 & -4 & 3 & -1 & 0 & -1 \\ 3 & 1 & 3 & -5 & 4 & -2 & 0 & -2 \\ 3 & 1 & 2 & -4 & 3 & -1 & -1 & -1 \\ 2 & 1 & 2 & -3 & 2 & -1 & -1 & 0 \\ 2 & 1 & 1 & -2 & 1 & -1 & 0 & 0 \\ 1 & 0 & 1 & -1 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 1 & -2 & 2 & -1 & 0 & -1 \\ 1 & 1 & 1 & -2 & 2 & -2 & 1 & -2 \\ 1 & 2 & 1 & -3 & 3 & -2 & 1 & -3 \\ 2 & 2 & 2 & -4 & 4 & -3 & 1 & -4 \\ 2 & 2 & 1 & -3 & 3 & -2 & 0 & -3 \\ 1 & 2 & 1 & -2 & 2 & -2 & 0 & -2 \\ 1 & 2 & 1 & -2 & 1 & -1 & 0 & -1 \\ 0 & 1 & 1 & -1 & 0 & 0 & 0 & -1 \end{pmatrix}, \\
\begin{pmatrix} 0 & -1 & -1 & 2 & -2 & 1 & 0 & 1 \\ -1 & -1 & -1 & 2 & -2 & 2 & -1 & 2 \\ -1 & -2 & -1 & 3 & -3 & 2 & -1 & 3 \\ -2 & -2 & -2 & 4 & -4 & 3 & -1 & 4 \\ -2 & -2 & -1 & 3 & -3 & 2 & 0 & 3 \\ -1 & -2 & -1 & 2 & -2 & 2 & 0 & 2 \\ -1 & -2 & -1 & 2 & -1 & 1 & 0 & 1 \\ 0 & -1 & -1 & 1 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 0 & 1 & -2 & 2 & -1 & 1 \\ -2 & 0 & -1 & 2 & -2 & 2 & -1 & 1 \\ -3 & 0 & 0 & 2 & -3 & 3 & -2 & 2 \\ -4 & 0 & -1 & 3 & -4 & 4 & -2 & 3 \\ -4 & 0 & 0 & 2 & -3 & 3 & -1 & 2 \\ -3 & 0 & 0 & 1 & -2 & 3 & -1 & 1 \\ -2 & -1 & 0 & 1 & -1 & 2 & -1 & 1 \\ -1 & 0 & 0 & 0 & 0 & 1 & -1 & 1 \end{pmatrix}, \begin{pmatrix} -1 & 0 & -1 & 2 & -2 & 1 & 0 & 0 \\ -1 & -1 & -2 & 3 & -2 & 1 & 0 & 1 \\ -2 & -1 & -2 & 4 & -3 & 1 & 0 & 1 \\ -3 & -1 & -3 & 5 & -4 & 2 & 0 & 2 \\ -3 & -1 & -2 & 4 & -3 & 1 & 1 & 1 \\ -2 & -1 & -2 & 3 & -2 & 1 & 1 & 0 \\ -2 & -1 & -1 & 2 & -1 & 1 & 0 & 0 \\ -1 & 0 & -1 & 1 & 0 & 0 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} -1 & -1 & 0 & 1 & -1 & 2 & -2 & 1 \\ -1 & -1 & -1 & 2 & -2 & 3 & -2 & 0 \\ -2 & -2 & 0 & 2 & -2 & 4 & -3 & 0 \\ -2 & -3 & -1 & 4 & -4 & 6 & -4 & 0 \\ -2 & -2 & 0 & 3 & -4 & 5 & -3 & 0 \\ -2 & -1 & 0 & 2 & -3 & 4 & -2 & 0 \\ -1 & -1 & 0 & 1 & -2 & 3 & -1 & 0 \\ 0 & 0 & 0 & 0 & -1 & 2 & -1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & -1 & -1 & 2 & -1 & 1 & -1 & 0 \\ 0 & -2 & -2 & 3 & -2 & 2 & -1 & 0 \\ -1 & -3 & -2 & 4 & -2 & 2 & -1 & -1 \\ -1 & -4 & -3 & 6 & -4 & 4 & -2 & -1 \\ -1 & -3 & -2 & 5 & -4 & 3 & -1 & -1 \\ -1 & -2 & -2 & 4 & -3 & 2 & 0 & -1 \\ -1 & -1 & -1 & 2 & -2 & 2 & 0 & -1 \\ 0 & 0 & -1 & 1 & -1 & 1 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & -2 & -1 & 2 & -1 & 1 & -1 & 1 \\ 0 & -2 & -1 & 2 & -2 & 3 & -2 & 1 \\ 0 & -4 & -1 & 3 & -2 & 3 & -2 & 1 \\ 0 & -5 & -2 & 5 & -4 & 5 & -3 & 1 \\ 0 & -4 & -1 & 4 & -4 & 4 & -2 & 1 \\ 0 & -3 & -1 & 3 & -3 & 3 & -1 & 1 \\ 0 & -2 & -1 & 2 & -2 & 2 & 0 & 0 \\ 1 & -1 & -1 & 1 & -1 & 1 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 0 & 2 & 1 & -2 & 1 & -1 & 1 & -1 \\ 0 & 2 & 1 & -2 & 2 & -3 & 2 & -1 \\ 0 & 4 & 1 & -3 & 2 & -3 & 2 & -1 \\ 0 & 5 & 2 & -5 & 4 & -5 & 3 & -1 \\ 0 & 4 & 1 & -4 & 4 & -4 & 2 & -1 \\ 0 & 3 & 1 & -3 & 3 & -3 & 1 & -1 \\ 0 & 2 & 1 & -2 & 2 & -2 & 0 & 0 \\ -1 & 1 & 1 & -1 & 1 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 1 & 0 & -1 & 1 & -2 & 2 & -1 \\ 1 & 1 & 1 & -2 & 2 & -3 & 2 & 0 \\ 2 & 2 & 0 & -2 & 2 & -4 & 3 & 0 \\ 2 & 3 & 1 & -4 & 4 & -6 & 4 & 0 \\ 2 & 2 & 0 & -3 & 4 & -5 & 3 & 0 \\ 2 & 1 & 0 & -2 & 3 & -4 & 2 & 0 \\ 1 & 1 & 0 & -1 & 2 & -3 & 1 & 0 \\ 0 & 0 & 0 & 0 & 1 & -2 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 1 & 1 & -2 & 1 & -1 & 1 & 0 \\ 0 & 2 & 2 & -3 & 2 & -2 & 1 & 0 \\ 1 & 3 & 2 & -4 & 2 & -2 & 1 & 1 \\ 1 & 4 & 3 & -6 & 4 & -4 & 2 & 1 \\ 1 & 3 & 2 & -5 & 4 & -3 & 1 & 1 \\ 1 & 2 & 2 & -4 & 3 & -2 & 0 & 1 \\ 1 & 1 & 1 & -2 & 2 & -2 & 0 & 1 \\ 0 & 0 & 1 & -1 & 1 & -1 & 0 & 1 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} 0 & -2 & -1 & 2 & -1 & 1 & 0 & 0 \\ -1 & -2 & -1 & 2 & -1 & 2 & -1 & 1 \\ -1 & -4 & -1 & 3 & -1 & 2 & -1 & 1 \\ -2 & -5 & -2 & 5 & -2 & 3 & -2 & 2 \\ -2 & -4 & -1 & 4 & -2 & 2 & -1 & 2 \\ -1 & -3 & -1 & 3 & -2 & 2 & -1 & 2 \\ -1 & -2 & -1 & 2 & -1 & 1 & 0 & 1 \\ 0 & -1 & -1 & 1 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 0 & 1 & -1 & 2 & -1 & 0 \\ -2 & -1 & -1 & 2 & -1 & 2 & -1 & 0 \\ -3 & -2 & 0 & 2 & -1 & 3 & -2 & 0 \\ -4 & -3 & -1 & 4 & -2 & 4 & -3 & 1 \\ -4 & -2 & 0 & 3 & -2 & 3 & -2 & 1 \\ -3 & -1 & 0 & 2 & -2 & 3 & -2 & 1 \\ -2 & -1 & 0 & 1 & -1 & 2 & -1 & 1 \\ -1 & 0 & 0 & 0 & 0 & 1 & -1 & 1 \end{pmatrix}, \begin{pmatrix} -1 & -1 & -1 & 2 & -1 & 1 & 0 & -1 \\ -1 & -2 & -2 & 3 & -1 & 1 & 0 & 0 \\ -2 & -3 & -2 & 4 & -1 & 1 & 0 & -1 \\ -3 & -4 & -3 & 6 & -2 & 2 & -1 & 0 \\ -3 & -3 & -2 & 5 & -2 & 1 & 0 & 0 \\ -2 & -2 & -2 & 4 & -2 & 1 & 0 & 0 \\ -2 & -1 & -1 & 2 & -1 & 1 & 0 & 0 \\ -1 & 0 & -1 & 1 & 0 & 0 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 0 & 0 & 2 & -2 & 1 & -1 & 1 & 0 \\ -1 & 1 & 3 & -3 & 2 & -2 & 1 & 0 \\ -1 & 1 & 4 & -4 & 2 & -2 & 2 & 0 \\ -1 & 2 & 5 & -6 & 4 & -4 & 3 & 0 \\ -1 & 2 & 4 & -5 & 3 & -3 & 2 & 1 \\ 0 & 2 & 3 & -4 & 2 & -2 & 1 & 1 \\ 0 & 1 & 2 & -2 & 1 & -2 & 1 & 1 \\ 0 & 0 & 1 & -1 & 1 & -1 & 0 & 1 \end{pmatrix}, \begin{pmatrix} -1 & 1 & 2 & -2 & 1 & -1 & 1 & -1 \\ -1 & 1 & 2 & -2 & 2 & -3 & 2 & -1 \\ -2 & 2 & 3 & -3 & 2 & -3 & 3 & -2 \\ -2 & 3 & 4 & -5 & 4 & -5 & 4 & -2 \\ -2 & 3 & 3 & -4 & 3 & -4 & 3 & -1 \\ -1 & 3 & 2 & -3 & 2 & -3 & 2 & -1 \\ -1 & 2 & 2 & -2 & 1 & -2 & 1 & 0 \\ -1 & 1 & 1 & -1 & 1 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 1 & -1 & 1 & -2 & 2 & -1 \\ 0 & 0 & 2 & -2 & 2 & -3 & 2 & 0 \\ 0 & 0 & 2 & -2 & 2 & -4 & 4 & -1 \\ 0 & 1 & 3 & -4 & 4 & -6 & 5 & -1 \\ 0 & 1 & 2 & -3 & 3 & -5 & 4 & 0 \\ 1 & 1 & 1 & -2 & 2 & -4 & 3 & 0 \\ 0 & 1 & 1 & -1 & 1 & -3 & 2 & 0 \\ 0 & 0 & 0 & 0 & 1 & -2 & 1 & 0 \end{pmatrix}, \\
\begin{pmatrix} 0 & 0 & -1 & 1 & -1 & 2 & -2 & 1 \\ 0 & 0 & -2 & 2 & -2 & 3 & -2 & 0 \\ 0 & 0 & -2 & 2 & -2 & 4 & -4 & 1 \\ 0 & -1 & -3 & 4 & -4 & 6 & -5 & 1 \\ 0 & -1 & -2 & 3 & -3 & 5 & -4 & 0 \\ -1 & -1 & -1 & 2 & -2 & 4 & -3 & 0 \\ 0 & -1 & -1 & 1 & -1 & 3 & -2 & 0 \\ 0 & 0 & 0 & 0 & -1 & 2 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 & -2 & 2 & -1 & 1 & -1 & 0 \\ 1 & -1 & -3 & 3 & -2 & 2 & -1 & 0 \\ 1 & -1 & -4 & 4 & -2 & 2 & -2 & 0 \\ 1 & -2 & -5 & 6 & -4 & 4 & -3 & 0 \\ 1 & -2 & -4 & 5 & -3 & 3 & -2 & -1 \\ 0 & -2 & -3 & 4 & -2 & 2 & -1 & -1 \\ 0 & -1 & -2 & 2 & -1 & 2 & -1 & -1 \\ 0 & 0 & -1 & 1 & -1 & 1 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 1 & -1 & -2 & 2 & -1 & 1 & -1 & 1 \\ 1 & -1 & -2 & 2 & -2 & 3 & -2 & 1 \\ 2 & -2 & -3 & 3 & -2 & 3 & -3 & 2 \\ 2 & -3 & -4 & 5 & -4 & 5 & -4 & 2 \\ 2 & -3 & -3 & 4 & -3 & 4 & -3 & 1 \\ 1 & -3 & -2 & 3 & -2 & 3 & -2 & 1 \\ 1 & -2 & -2 & 2 & -1 & 2 & -1 & 0 \\ 1 & -1 & -1 & 1 & -1 & 1 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 0 & 0 & 2 & -2 & 1 & -1 & 1 & 0 \\ 0 & 1 & 3 & -3 & 1 & -1 & 1 & -1 \\ 0 & 1 & 4 & -4 & 1 & -1 & 2 & -1 \\ 1 & 2 & 5 & -6 & 2 & -2 & 3 & -2 \\ 1 & 2 & 4 & -5 & 1 & -1 & 2 & -1 \\ 1 & 2 & 3 & -4 & 1 & -1 & 1 & 0 \\ 1 & 1 & 2 & -2 & 0 & -1 & 1 & 0 \\ 1 & 0 & 1 & -1 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 1 & 2 & -2 & 1 & -1 & 1 & -1 \\ 0 & 1 & 2 & -2 & 1 & -2 & 2 & -2 \\ -1 & 2 & 3 & -3 & 1 & -2 & 3 & -3 \\ 0 & 3 & 4 & -5 & 2 & -3 & 4 & -4 \\ 0 & 3 & 3 & -4 & 1 & -2 & 3 & -3 \\ 0 & 3 & 2 & -3 & 1 & -2 & 2 & -2 \\ 0 & 2 & 2 & -2 & 0 & -1 & 1 & -1 \\ 0 & 1 & 1 & -1 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 1 & -1 & 1 & -2 & 2 & -1 \\ 1 & 0 & 2 & -2 & 1 & -2 & 2 & -1 \\ 1 & 0 & 2 & -2 & 1 & -3 & 4 & -2 \\ 2 & 1 & 3 & -4 & 2 & -4 & 5 & -3 \\ 2 & 1 & 2 & -3 & 1 & -3 & 4 & -2 \\ 2 & 1 & 1 & -2 & 1 & -3 & 3 & -1 \\ 1 & 1 & 1 & -1 & 0 & -2 & 2 & -1 \\ 1 & 0 & 0 & 0 & 0 & -1 & 1 & -1 \end{pmatrix}, \\
\begin{pmatrix} 0 & 0 & -1 & 1 & -1 & 2 & -2 & 1 \\ -1 & 0 & -2 & 2 & -1 & 2 & -2 & 1 \\ -1 & 0 & -2 & 2 & -1 & 3 & -4 & 2 \\ -2 & -1 & -3 & 4 & -2 & 4 & -5 & 3 \\ -2 & -1 & -2 & 3 & -1 & 3 & -4 & 2 \\ -2 & -1 & -1 & 2 & -1 & 3 & -3 & 1 \\ -1 & -1 & -1 & 1 & 0 & 2 & -2 & 1 \\ -1 & 0 & 0 & 0 & 0 & 1 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & -2 & 2 & -1 & 1 & -1 & 0 \\ 0 & -1 & -3 & 3 & -1 & 1 & -1 & 1 \\ 0 & -1 & -4 & 4 & -1 & 1 & -2 & 1 \\ -1 & -2 & -5 & 6 & -2 & 2 & -3 & 2 \\ -1 & -2 & -4 & 5 & -1 & 1 & -2 & 1 \\ -1 & -2 & -3 & 4 & -1 & 1 & -1 & 0 \\ -1 & -1 & -2 & 2 & 0 & 1 & -1 & 0 \\ -1 & 0 & -1 & 1 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & -1 & -2 & 2 & -1 & 1 & -1 & 1 \\ 0 & -1 & -2 & 2 & -1 & 2 & -2 & 2 \\ 1 & -2 & -3 & 3 & -1 & 2 & -3 & 3 \\ 0 & -3 & -4 & 5 & -2 & 3 & -4 & 4 \\ 0 & -3 & -3 & 4 & -1 & 2 & -3 & 3 \\ 0 & -3 & -2 & 3 & -1 & 2 & -2 & 2 \\ 0 & -2 & -2 & 2 & 0 & 1 & -1 & 1 \\ 0 & -1 & -1 & 1 & 0 & 0 & 0 & 1 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} -1 & 0 & 0 & 1 & -2 & 2 & -1 & 1 \\ -1 & 0 & -1 & 2 & -3 & 3 & -1 & 0 \\ -2 & 0 & 0 & 2 & -4 & 4 & -2 & 1 \\ -2 & -1 & -1 & 4 & -6 & 6 & -3 & 1 \\ -2 & -1 & 0 & 3 & -5 & 5 & -2 & 0 \\ -2 & -1 & 0 & 2 & -3 & 4 & -2 & 0 \\ -1 & -1 & 0 & 1 & -2 & 3 & -1 & 0 \\ 0 & 0 & 0 & 0 & -1 & 2 & -1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 0 & -1 & 2 & -2 & 1 & 0 & 0 \\ 0 & -1 & -2 & 3 & -3 & 2 & 0 & 0 \\ -1 & -1 & -2 & 4 & -4 & 2 & 0 & 0 \\ -1 & -2 & -3 & 6 & -6 & 4 & -1 & 0 \\ -1 & -2 & -2 & 5 & -5 & 3 & 0 & -1 \\ -1 & -2 & -2 & 4 & -3 & 2 & 0 & -1 \\ -1 & -1 & -1 & 2 & -2 & 2 & 0 & -1 \\ 0 & 0 & -1 & 1 & -1 & 1 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & -1 & -1 & 2 & -2 & 1 & 0 & 1 \\ 0 & -1 & -1 & 2 & -3 & 3 & -1 & 1 \\ 0 & -2 & -1 & 3 & -4 & 3 & -1 & 2 \\ 0 & -3 & -2 & 5 & -6 & 5 & -2 & 2 \\ 0 & -3 & -1 & 4 & -5 & 4 & -1 & 1 \\ 0 & -3 & -1 & 3 & -3 & 3 & -1 & 1 \\ 0 & -2 & -1 & 2 & -2 & 2 & 0 & 0 \\ 1 & -1 & -1 & 1 & -1 & 1 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 0 & 1 & 1 & -2 & 2 & -1 & 0 & -1 \\ 0 & 1 & 1 & -2 & 3 & -3 & 1 & -1 \\ 0 & 2 & 1 & -3 & 4 & -3 & 1 & -2 \\ 0 & 3 & 2 & -5 & 6 & -5 & 2 & -2 \\ 0 & 3 & 1 & -4 & 5 & -4 & 1 & -1 \\ 0 & 3 & 1 & -3 & 3 & -3 & 1 & -1 \\ 0 & 2 & 1 & -2 & 2 & -2 & 0 & 0 \\ -1 & 1 & 1 & -1 & 1 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 0 & -1 & 2 & -2 & 1 & -1 \\ 1 & 0 & 1 & -2 & 3 & -3 & 1 & 0 \\ 2 & 0 & 0 & -2 & 4 & -4 & 2 & -1 \\ 2 & 1 & 1 & -4 & 6 & -6 & 3 & -1 \\ 2 & 1 & 0 & -3 & 5 & -5 & 2 & 0 \\ 2 & 1 & 0 & -2 & 3 & -4 & 2 & 0 \\ 1 & 1 & 0 & -1 & 2 & -3 & 1 & 0 \\ 0 & 0 & 0 & 0 & 1 & -2 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 1 & -2 & 2 & -1 & 0 & 0 \\ 0 & 1 & 2 & -3 & 3 & -2 & 0 & 0 \\ 1 & 1 & 2 & -4 & 4 & -2 & 0 & 0 \\ 1 & 2 & 3 & -6 & 6 & -4 & 1 & 0 \\ 1 & 2 & 2 & -5 & 5 & -3 & 0 & 1 \\ 1 & 2 & 2 & -4 & 3 & -2 & 0 & 1 \\ 1 & 1 & 1 & -2 & 2 & -2 & 0 & 1 \\ 0 & 0 & 1 & -1 & 1 & -1 & 0 & 1 \end{pmatrix}, \\
\begin{pmatrix} -1 & 0 & 0 & 1 & -2 & 2 & -1 & 1 \\ -2 & 0 & -1 & 2 & -2 & 2 & -1 & 1 \\ -3 & 0 & 0 & 2 & -3 & 3 & -2 & 2 \\ -4 & -1 & -1 & 4 & -4 & 4 & -3 & 3 \\ -4 & -1 & 0 & 3 & -3 & 3 & -2 & 2 \\ -3 & -1 & 0 & 2 & -2 & 3 & -2 & 1 \\ -2 & -1 & 0 & 1 & -1 & 2 & -1 & 1 \\ -1 & 0 & 0 & 0 & 0 & 1 & -1 & 1 \end{pmatrix}, \begin{pmatrix} -1 & 0 & -1 & 2 & -2 & 1 & 0 & 0 \\ -1 & -1 & -2 & 3 & -2 & 1 & 0 & 1 \\ -2 & -1 & -2 & 4 & -3 & 1 & 0 & 1 \\ -3 & -2 & -3 & 6 & -4 & 2 & -1 & 2 \\ -3 & -2 & -2 & 5 & -3 & 1 & 0 & 1 \\ -2 & -2 & -2 & 4 & -2 & 1 & 0 & 0 \\ -2 & -1 & -1 & 2 & -1 & 1 & 0 & 0 \\ -1 & 0 & -1 & 1 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -1 & -1 & 2 & -2 & 1 & 0 & 1 \\ -1 & -1 & -1 & 2 & -2 & 2 & -1 & 2 \\ -1 & -2 & -1 & 3 & -3 & 2 & -1 & 3 \\ -2 & -3 & -2 & 5 & -4 & 3 & -2 & 4 \\ -2 & -3 & -1 & 4 & -3 & 2 & -1 & 3 \\ -1 & -3 & -1 & 3 & -2 & 2 & -1 & 2 \\ -1 & -2 & -1 & 2 & -1 & 1 & 0 & 1 \\ 0 & -1 & -1 & 1 & 0 & 0 & 0 & 1 \end{pmatrix}, \\
\begin{pmatrix} 0 & 1 & 1 & -2 & 2 & -1 & 0 & -1 \\ 1 & 1 & 1 & -2 & 2 & -2 & 1 & -2 \\ 1 & 2 & 1 & -3 & 3 & -2 & 1 & -3 \\ 2 & 3 & 2 & -5 & 4 & -3 & 2 & -4 \\ 2 & 3 & 1 & -4 & 3 & -2 & 1 & -3 \\ 1 & 3 & 1 & -3 & 2 & -2 & 1 & -2 \\ 1 & 2 & 1 & -2 & 1 & -1 & 0 & -1 \\ 0 & 1 & 1 & -1 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 0 & -1 & 2 & -2 & 1 & -1 \\ 2 & 0 & 1 & -2 & 2 & -2 & 1 & -1 \\ 3 & 0 & 0 & -2 & 3 & -3 & 2 & -2 \\ 4 & 1 & 1 & -4 & 4 & -4 & 3 & -3 \\ 4 & 1 & 0 & -3 & 3 & -3 & 2 & -2 \\ 3 & 1 & 0 & -2 & 2 & -3 & 2 & -1 \\ 2 & 1 & 0 & -1 & 1 & -2 & 1 & -1 \\ 1 & 0 & 0 & 0 & 0 & -1 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 1 & -2 & 2 & -1 & 0 & 0 \\ 1 & 1 & 2 & -3 & 2 & -1 & 0 & -1 \\ 2 & 1 & 2 & -4 & 3 & -1 & 0 & -1 \\ 3 & 2 & 3 & -6 & 4 & -2 & 1 & -2 \\ 3 & 2 & 2 & -5 & 3 & -1 & 0 & -1 \\ 2 & 2 & 2 & -4 & 2 & -1 & 0 & 0 \\ 2 & 1 & 1 & -2 & 1 & -1 & 0 & 0 \\ 1 & 0 & 1 & -1 & 0 & 0 & 0 & 0 \end{pmatrix}.
\end{pmatrix}$$

The character table of $G^{s_{15}}$:

	10										20										
$\chi_{15}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{15}^{(2)}$	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	1	-1	-1
$\chi_{15}^{(3)}$	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	-1	-1	1
$\chi_{15}^{(4)}$	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1	-1	-1	1
$\chi_{15}^{(5)}$	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	-1
$\chi_{15}^{(6)}$	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1
$\chi_{15}^{(7)}$	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	-1	-1	-1	-1
$\chi_{15}^{(8)}$	1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_{15}^{(9)}$	1	A	/A	-/A	-1	-A	-1	-A	-/A	/A	1	A	-/A	-1	-A	A	/A	1	/A	1	A
$\chi_{15}^{(10)}$	1	/A	A	-A	-1	-/A	-1	-/A	-A	A	1	/A	-A	-1	-/A	/A	A	1	A	1	/A
$\chi_{15}^{(11)}$	1	A	/A	-/A	-1	-A	-1	-A	-/A	/A	1	A	/A	1	A	-A	-/A	-1	-/A	-1	-A
$\chi_{15}^{(12)}$	1	/A	A	-A	-1	-/A	-1	-/A	-A	A	1	/A	A	1	/A	-/A	-A	-1	-A	-1	-/A
$\chi_{15}^{(13)}$	1	A	/A	-/A	-1	-A	1	A	/A	-/A	-1	-A	-/A	-1	-A	A	/A	1	-/A	-1	-A
$\chi_{15}^{(14)}$	1	/A	A	-A	-1	-/A	1	/A	A	-A	-1	-/A	-A	-1	-/A	/A	A	1	-A	-1	-/A
$\chi_{15}^{(15)}$	1	A	/A	-/A	-1	-A	1	A	/A	-/A	-1	-A	/A	1	A	-A	-/A	-1	/A	1	A
$\chi_{15}^{(16)}$	1	/A	A	-A	-1	-/A	1	/A	A	-A	-1	-/A	A	1	/A	-/A	-A	-1	A	1	/A
$\chi_{15}^{(17)}$	1	A	/A	/A	1	A	-1	-A	-/A	-/A	-1	-A	-/A	-1	-A	-A	-/A	-1	/A	1	A
$\chi_{15}^{(18)}$	1	/A	A	A	1	/A	-1	-/A	-A	-A	-1	-/A	-A	-1	-/A	-/A	-A	-1	A	1	/A
$\chi_{15}^{(19)}$	1	A	/A	/A	1	A	-1	-A	-/A	-/A	-1	-A	/A	1	A	A	/A	1	-/A	-1	-A
$\chi_{15}^{(20)}$	1	/A	A	A	1	/A	-1	-/A	-A	-A	-1	-/A	A	1	/A	/A	A	1	-A	-1	-/A
$\chi_{15}^{(21)}$	1	A	/A	/A	1	A	1	A	/A	/A	1	A	-/A	-1	-A	-A	-/A	-1	-/A	-1	-A
$\chi_{15}^{(22)}$	1	/A	A	A	1	/A	1	/A	A	A	1	/A	-A	-1	-/A	-/A	-A	-1	-A	-1	-/A
$\chi_{15}^{(23)}$	1	A	/A	/A	1	A	1	A	/A	/A	1	A	/A	1	A	A	/A	1	/A	1	A
$\chi_{15}^{(24)}$	1	/A	A	A	1	/A	1	/A	A	A	1	/A	A	1	/A	/A	A	1	A	1	/A
$\chi_{15}^{(25)}$	5	5	5	5	5	5	5	5	5	5	5	5	1	1	1	1	1	1	1	1	1
$\chi_{15}^{(26)}$	5	5	5	5	5	5	5	5	5	5	5	5	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_{15}^{(27)}$	5	5	5	-5	-5	-5	5	5	5	-5	-5	-5	1	1	1	-1	-1	-1	1	1	-1
$\chi_{15}^{(28)}$	5	5	5	-5	-5	-5	5	5	5	-5	-5	-5	-1	-1	-1	1	1	1	-1	-1	1
$\chi_{15}^{(29)}$	5	5	5	5	5	5	-5	-5	-5	-5	-5	-5	-1	-1	-1	-1	-1	-1	1	1	1
$\chi_{15}^{(30)}$	5	5	5	5	5	5	-5	-5	-5	-5	-5	-5	1	1	1	1	1	1	-1	-1	-1
$\chi_{15}^{(31)}$	5	5	5	-5	-5	-5	-5	-5	-5	5	5	5	-1	-1	-1	1	1	1	1	1	-1
$\chi_{15}^{(32)}$	5	5	5	-5	-5	-5	-5	-5	-5	5	5	5	1	1	1	-1	-1	-1	-1	-1	1
$\chi_{15}^{(33)}$	5	5	5	5	5	5	5	5	5	5	5	5	-3	-3	-3	-3	-3	-3	-3	-3	-3
$\chi_{15}^{(34)}$	5	5	5	5	5	5	5	5	5	5	5	5	3	3	3	3	3	3	3	3	3
$\chi_{15}^{(35)}$	5	5	5	-5	-5	-5	5	5	5	-5	-5	-5	-3	-3	-3	3	3	3	-3	-3	-3
$\chi_{15}^{(36)}$	5	5	5	-5	-5	-5	5	5	5	-5	-5	-5	3	3	3	-3	-3	-3	3	3	-3
$\chi_{15}^{(37)}$	5	5	5	5	5	5	-5	-5	-5	-5	-5	-5	3	3	3	3	3	3	-3	-3	-3
$\chi_{15}^{(38)}$	5	5	5	5	5	5	-5	-5	-5	-5	-5	-5	-3	-3	-3	-3	-3	-3	3	3	3
$\chi_{15}^{(39)}$	5	5	5	-5	-5	-5	-5	-5	-5	5	5	5	3	3	3	-3	-3	-3	-3	-3	-3
$\chi_{15}^{(40)}$	5	5	5	-5	-5	-5	-5	-5	-5	5	5	5	-3	-3	-3	3	3	3	3	3	-3
$\chi_{15}^{(41)}$	5	B	/B	/B	5	B	5	B	/B	/B	5	B	/A	1	A	A	/A	1	/A	1	A
$\chi_{15}^{(42)}$	5	/B	B	B	5	/B	5	/B	B	B	5	/B	A	1	/A	/A	A	1	A	1	/A
$\chi_{15}^{(43)}$	5	B	/B	/B	5	B	5	B	/B	/B	5	B	-/A	-1	-A	-A	-/A	-1	-/A	-1	-A
$\chi_{15}^{(44)}$	5	/B	B	B	5	/B	5	/B	B	B	5	/B	-A	-1	-/A	-/A	-A	-1	-A	-1	-/A
$\chi_{15}^{(45)}$	5	B	/B	-/B	-5	-B	5	B	/B	-/B	-5	-B	/A	1	A	-A	-/A	-1	/A	1	A

	10														20													
$\chi_{15}^{(46)}$	5	/B	B	-B	-5	-/B	5	/B	B	-B	-5	-/B	A	1	/A	-/A	-A	-1	A	1	/A	-/A	-A	-1				
$\chi_{15}^{(47)}$	5	B	/B	-/B	-5	-B	5	B	/B	-/B	-5	-B	-/A	-1	-A	A	/A	1	-/A	-1	-A	A	/A	1				
$\chi_{15}^{(48)}$	5	/B	B	-B	-5	-/B	5	/B	B	-B	-5	-/B	-A	-1	-/A	/A	A	1	-A	-1	-/A	/A	A	1				
$\chi_{15}^{(49)}$	5	B	/B	/B	5	B	-5	-B	-/B	-/B	-5	-B	-/A	-1	-A	-A	-/A	-1	/A	1	A	A	/A	1				
$\chi_{15}^{(50)}$	5	/B	B	B	5	/B	-5	-/B	-B	-B	-5	-/B	-A	-1	-/A	-/A	-A	-1	A	1	/A	/A	A	1				
$\chi_{15}^{(51)}$	5	B	/B	/B	5	B	-5	-B	-/B	-/B	-5	-B	/A	1	A	A	/A	1	-/A	-1	-A	-A	-/A	-1				
$\chi_{15}^{(52)}$	5	/B	B	B	5	/B	-5	-/B	-B	-B	-5	-/B	A	1	/A	/A	A	1	-A	-1	-/A	-/A	-A	-1				
$\chi_{15}^{(53)}$	5	B	/B	-/B	-5	-B	-5	-B	-/B	/B	5	B	-/A	-1	-A	A	/A	1	/A	1	A	-A	-/A	-1				
$\chi_{15}^{(54)}$	5	/B	B	-B	-5	-/B	-5	-/B	-B	B	5	/B	-A	-1	-/A	/A	A	1	A	1	/A	-/A	-A	-1				
$\chi_{15}^{(55)}$	5	B	/B	-/B	-5	-B	-5	-B	-/B	/B	5	B	/A	1	A	-A	-/A	-1	-/A	-1	-A	A	/A	1				
$\chi_{15}^{(56)}$	5	/B	B	-B	-5	-/B	-5	-/B	-B	B	5	/B	A	1	/A	-/A	-A	-1	-A	-1	-/A	/A	A	1				
$\chi_{15}^{(57)}$	5	B	/B	/B	5	B	5	B	/B	/B	5	B	F	-3	/F	/F	F	-3	F	-3	/F	/F	F	-3				
$\chi_{15}^{(58)}$	5	/B	B	B	5	/B	5	/B	B	B	5	/B	/F	-3	F	F	/F	-3	/F	-3	F	F	/F	-3				
$\chi_{15}^{(59)}$	5	B	/B	/B	5	B	5	B	/B	/B	5	B	-F	3	-/F	-/F	-F	3	-F	3	-/F	-/F	-F	3				
$\chi_{15}^{(60)}$	5	/B	B	B	5	/B	5	/B	B	B	5	/B	-/F	3	-F	-F	-/F	3	-/F	3	-F	-F	-/F	3				
$\chi_{15}^{(61)}$	5	B	/B	-/B	-5	-B	5	B	/B	-/B	-5	-B	F	-3	/F	-/F	-F	3	F	-3	/F	-/F	-F	3				
$\chi_{15}^{(62)}$	5	/B	B	-B	-5	-/B	5	/B	B	-B	-5	-/B	/F	-3	F	-F	-/F	3	/F	-3	F	-F	-/F	3				
$\chi_{15}^{(63)}$	5	B	/B	-/B	-5	-B	5	B	/B	-/B	-5	-B	-F	3	-/F	/F	F	-3	-F	3	-/F	/F	F	-3				
$\chi_{15}^{(64)}$	5	/B	B	-B	-5	-/B	5	/B	B	-B	-5	-/B	-/F	3	-F	F	/F	-3	-/F	3	-F	F	/F	-3				
$\chi_{15}^{(65)}$	5	B	/B	/B	5	B	-5	-B	-/B	-/B	-5	-B	-F	3	-/F	-/F	-F	3	F	-3	/F	/F	F	-3				
$\chi_{15}^{(66)}$	5	/B	B	B	5	/B	-5	-/B	-B	-B	-5	-/B	-/F	3	-F	-F	-/F	3	/F	-3	F	F	/F	-3				
$\chi_{15}^{(67)}$	5	B	/B	/B	5	B	-5	-B	-/B	-/B	-5	-B	F	-3	/F	/F	F	-3	-F	3	-/F	-/F	-F	3				
$\chi_{15}^{(68)}$	5	/B	B	B	5	/B	-5	-/B	-B	-B	-5	-/B	/F	-3	F	F	/F	-3	-/F	3	-F	-F	-/F	3				
$\chi_{15}^{(69)}$	5	B	/B	-/B	-5	-B	-5	-B	-/B	/B	5	B	-F	3	-/F	/F	F	-3	F	-3	/F	-/F	-F	3				
$\chi_{15}^{(70)}$	5	/B	B	-B	-5	-/B	-5	-/B	-B	B	5	/B	-/F	3	-F	F	/F	-3	/F	-3	F	-F	-/F	3				
$\chi_{15}^{(71)}$	5	B	/B	-/B	-5	-B	-5	-B	-/B	/B	5	B	F	-3	/F	-/F	-F	3	-F	3	-/F	/F	F	-3				
$\chi_{15}^{(72)}$	5	/B	B	-B	-5	-/B	-5	-/B	-B	B	5	/B	/F	-3	F	-F	-/F	3	-/F	3	-F	F	/F	-3				
$\chi_{15}^{(73)}$	9	9	9	9	9	9	9	9	9	9	9	9	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3				
$\chi_{15}^{(74)}$	9	9	9	9	9	9	9	9	9	9	9	9	3	3	3	3	3	3	3	3	3	3	3	3				
$\chi_{15}^{(75)}$	9	9	9	-9	-9	-9	9	9	9	-9	-9	-9	-3	-3	-3	3	3	3	-3	-3	-3	3	3	3				
$\chi_{15}^{(76)}$	9	9	9	-9	-9	-9	9	9	9	-9	-9	-9	3	3	3	-3	-3	-3	3	3	3	-3	-3	-3				
$\chi_{15}^{(77)}$	9	9	9	9	9	9	-9	-9	-9	-9	-9	-9	3	3	3	3	3	3	-3	-3	-3	-3	-3	-3				
$\chi_{15}^{(78)}$	9	9	9	9	9	9	-9	-9	-9	-9	-9	-9	-3	-3	-3	-3	-3	-3	3	3	3	3	3	3				
$\chi_{15}^{(79)}$	9	9	9	-9	-9	-9	-9	-9	-9	9	9	9	3	3	3	-3	-3	-3	-3	-3	-3	3	3	3				
$\chi_{15}^{(80)}$	9	9	9	-9	-9	-9	-9	-9	-9	9	9	9	-3	-3	-3	3	3	3	3	3	3	-3	-3	-3				
$\chi_{15}^{(81)}$	9	C	/C	/C	9	C	9	C	/C	/C	9	C	F	-3	/F	/F	F	-3	F	-3	/F	/F	F	-3				
$\chi_{15}^{(82)}$	9	/C	C	C	9	/C	9	/C	C	C	9	/C	/F	-3	F	F	/F	-3	/F	-3	F	F	/F	-3				
$\chi_{15}^{(83)}$	9	C	/C	/C	9	C	9	C	/C	/C	9	C	-F	3	-/F	-/F	-F	3	-F	3	-/F	-/F	-F	3				
$\chi_{15}^{(84)}$	9	/C	C	C	9	/C	9	/C	C	C	9	/C	-/F	3	-F	-F	-/F	3	-/F	3	-F	-F	-/F	3				
$\chi_{15}^{(85)}$	9	C	/C	-/C	-9	-C	9	C	/C	-/C	-9	-C	F	-3	/F	-/F	-F	3	F	-3	/F	-/F	-F	3				
$\chi_{15}^{(86)}$	9	/C	C	-C	-9	-/C	9	/C	C	-C	-9	-/C	/F	-3	F	-F	-/F	3	/F	-3	F	-F	-/F	3				
$\chi_{15}^{(87)}$	9	C	/C	-/C	-9	-C	9	C	/C	-/C	-9	-C	-F	3	-/F	/F	F	-3	-F	3	-/F	/F	F	-3				
$\chi_{15}^{(88)}$	9	/C	C	-C	-9	-/C	9	/C	C	-C	-9	-/C	-/F	3	-F	F	/F	-3	-/F	3	-F	F	/F	-3				
$\chi_{15}^{(89)}$	9	C	/C	/C	9	C	-9	-C	-/C	-/C	-9	-C	-F	3	-/F	-/F	-F	3	F	-3	/F	/F	F	-3				
$\chi_{15}^{(90)}$	9	/C	C	C	9	/C	-9	-/C	-C	-C	-9	-/C	-/F	3	-F	-F	-/F	3	/F	-3	F	F	/F	-3				

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$\chi_{15}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{15}^{(2)}$	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	-1	-1	-1	-1	-1	1	1
$\chi_{15}^{(3)}$	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	-1	-1	-1	-1	-1	1	1
$\chi_{15}^{(4)}$	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	-1	-1	1	1	1	-1
$\chi_{15}^{(5)}$	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	-1	-1	1	1	1	-1
$\chi_{15}^{(6)}$	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	-1	-1	-1	-1
$\chi_{15}^{(7)}$	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	-1	-1	-1	-1
$\chi_{15}^{(8)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-1
$\chi_{15}^{(9)}$	A	/A	1	-1	-A	-/A	-A	-/A	-1	1	A	/A	/A	1	A	-A	-/A	-1	-/A	-1	-A
$\chi_{15}^{(10)}$	/A	A	1	-1	-/A	-A	-/A	-A	-1	1	/A	A	A	1	/A	-/A	-A	-1	-A	-1	-/A
$\chi_{15}^{(11)}$	A	/A	1	-1	-A	-/A	-A	-/A	-1	1	A	/A	/A	1	A	-A	-/A	-1	-/A	-1	-A
$\chi_{15}^{(12)}$	/A	A	1	-1	-/A	-A	-/A	-A	-1	1	/A	A	A	1	/A	-/A	-A	-1	-A	-1	-/A
$\chi_{15}^{(13)}$	A	/A	1	-1	-A	-/A	A	/A	1	-1	-A	-/A	/A	1	A	-A	-/A	-1	/A	1	A
$\chi_{15}^{(14)}$	/A	A	1	-1	-/A	-A	/A	A	1	-1	-/A	-A	A	1	/A	-/A	-A	-1	A	1	/A
$\chi_{15}^{(15)}$	A	/A	1	-1	-A	-/A	A	/A	1	-1	-A	-/A	/A	1	A	-A	-/A	-1	/A	1	A
$\chi_{15}^{(16)}$	/A	A	1	-1	-/A	-A	/A	A	1	-1	-/A	-A	A	1	/A	-/A	-A	-1	A	1	/A
$\chi_{15}^{(17)}$	A	/A	1	1	A	/A	-A	-/A	-1	-1	-A	-/A	/A	1	A	A	/A	1	-/A	-1	-A
$\chi_{15}^{(18)}$	/A	A	1	1	/A	A	-/A	-A	-1	-1	-/A	-A	A	1	/A	/A	A	1	-A	-1	-/A
$\chi_{15}^{(19)}$	A	/A	1	1	A	/A	-A	-/A	-1	-1	-A	-/A	/A	1	A	A	/A	1	-/A	-1	-A
$\chi_{15}^{(20)}$	/A	A	1	1	/A	A	-/A	-A	-1	-1	-/A	-A	A	1	/A	/A	A	1	-A	-1	-/A
$\chi_{15}^{(21)}$	A	/A	1	1	A	/A	A	/A	1	1	A	/A	/A	1	A	A	/A	1	/A	1	A
$\chi_{15}^{(22)}$	/A	A	1	1	/A	A	/A	A	1	1	/A	A	A	1	/A	/A	A	1	A	1	/A
$\chi_{15}^{(23)}$	A	/A	1	1	A	/A	A	/A	1	1	A	/A	/A	1	A	A	/A	1	/A	1	A
$\chi_{15}^{(24)}$	/A	A	1	1	/A	A	/A	A	1	1	/A	A	A	1	/A	/A	A	1	A	1	/A
$\chi_{15}^{(25)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1
$\chi_{15}^{(26)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1
$\chi_{15}^{(27)}$	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	1	1	1
$\chi_{15}^{(28)}$	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	1	1	1
$\chi_{15}^{(29)}$	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1
$\chi_{15}^{(30)}$	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1
$\chi_{15}^{(31)}$	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	-1	-1	1
$\chi_{15}^{(32)}$	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	-1	-1	1
$\chi_{15}^{(33)}$	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1
$\chi_{15}^{(34)}$	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1
$\chi_{15}^{(35)}$	2	2	2	-2	-2	-2	2	2	2	-2	-2	-2	1	1	1	-1	-1	-1	1	1	1
$\chi_{15}^{(36)}$	2	2	2	-2	-2	-2	2	2	2	-2	-2	-2	1	1	1	-1	-1	-1	1	1	1
$\chi_{15}^{(37)}$	2	2	2	2	2	2	-2	-2	-2	-2	-2	-2	1	1	1	1	1	1	-1	-1	-1
$\chi_{15}^{(38)}$	2	2	2	2	2	2	-2	-2	-2	-2	-2	-2	1	1	1	1	1	1	-1	-1	-1
$\chi_{15}^{(39)}$	2	2	2	-2	-2	-2	-2	-2	-2	2	2	2	1	1	1	-1	-1	-1	-1	-1	1
$\chi_{15}^{(40)}$	2	2	2	-2	-2	-2	-2	-2	-2	2	2	2	1	1	1	-1	-1	-1	-1	-1	1
$\chi_{15}^{(41)}$	-A	-/A	-1	-1	-A	-/A	-A	-/A	-1	-1	-A	-/A	/A	1	A	A	/A	1	/A	1	A
$\chi_{15}^{(42)}$	-/A	-A	-1	-1	-/A	-A	-/A	-A	-1	-1	-/A	-A	A	1	/A	/A	A	1	A	1	/A
$\chi_{15}^{(43)}$	-A	-/A	-1	-1	-A	-/A	-A	-/A	-1	-1	-A	-/A	/A	1	A	A	/A	1	/A	1	A
$\chi_{15}^{(44)}$	-/A	-A	-1	-1	-/A	-A	-/A	-A	-1	-1	-/A	-A	A	1	/A	/A	A	1	A	1	/A
$\chi_{15}^{(45)}$	-A	-/A	-1	1	A	/A	-A	-/A	-1	1	A	/A	/A	1	A	-A	-/A	-1	/A	1	A

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$\chi_{15}^{(46)}$	-/A	-A	-1	1	/A	A	-/A	-A	-1	1	/A	A	A	1	/A	-/A	-A	-1	A	1	/A	-/A	-A	-1	-1
$\chi_{15}^{(47)}$	-A	-/A	-1	1	A	/A	-A	-/A	-1	1	A	/A	/A	1	A	-A	-/A	-1	/A	1	A	-A	-/A	-1	1
$\chi_{15}^{(48)}$	-/A	-A	-1	1	/A	A	-/A	-A	-1	1	/A	A	A	1	/A	-/A	-A	-1	A	1	/A	-/A	-A	-1	1
$\chi_{15}^{(49)}$	-A	-/A	-1	-1	-A	-/A	A	/A	1	1	A	/A	/A	1	A	A	/A	1	-/A	-1	-A	-A	-/A	-1	1
$\chi_{15}^{(50)}$	-/A	-A	-1	-1	-/A	-A	/A	A	1	1	/A	A	A	1	/A	/A	A	1	-A	-1	-/A	-/A	-A	-1	1
$\chi_{15}^{(51)}$	-A	-/A	-1	-1	-A	-/A	A	/A	1	1	A	/A	/A	1	A	A	/A	1	-/A	-1	-A	-A	-/A	-1	-1
$\chi_{15}^{(52)}$	-/A	-A	-1	-1	-/A	-A	/A	A	1	1	/A	A	A	1	/A	/A	A	1	-A	-1	-/A	-/A	-A	-1	-1
$\chi_{15}^{(53)}$	-A	-/A	-1	1	A	/A	A	/A	1	-1	-A	-/A	/A	1	A	-A	-/A	-1	-/A	-1	-A	A	/A	1	1
$\chi_{15}^{(54)}$	-/A	-A	-1	1	/A	A	/A	A	1	-1	-/A	-A	A	1	/A	-/A	-A	-1	-A	-1	-/A	/A	A	1	1
$\chi_{15}^{(55)}$	-A	-/A	-1	1	A	/A	A	/A	1	-1	-A	-/A	/A	1	A	-A	-/A	-1	-/A	-1	-A	A	/A	1	-1
$\chi_{15}^{(56)}$	-/A	-A	-1	1	/A	A	/A	A	1	-1	-/A	-A	A	1	/A	-/A	-A	-1	-A	-1	-/A	/A	A	1	-1
$\chi_{15}^{(57)}$	-/G	-G	2	2	-/G	-G	-/G	-G	2	2	-/G	-G	/A	1	A	A	/A	1	/A	1	A	A	/A	1	-1
$\chi_{15}^{(58)}$	-G	-/G	2	2	-G	-/G	-G	-/G	2	2	-G	-/G	A	1	/A	/A	A	1	A	1	/A	/A	A	1	-1
$\chi_{15}^{(59)}$	-/G	-G	2	2	-/G	-G	-/G	-G	2	2	-/G	-G	/A	1	A	A	/A	1	/A	1	A	A	/A	1	1
$\chi_{15}^{(60)}$	-G	-/G	2	2	-G	-/G	-G	-/G	2	2	-G	-/G	A	1	/A	/A	A	1	A	1	/A	/A	A	1	1
$\chi_{15}^{(61)}$	-/G	-G	2	-2	/G	G	-/G	-G	2	-2	/G	G	/A	1	A	-A	-/A	-1	/A	1	A	-A	-/A	-1	-1
$\chi_{15}^{(62)}$	-G	-/G	2	-2	G	/G	-G	-/G	2	-2	G	/G	A	1	/A	-/A	-A	-1	A	1	/A	-/A	-A	-1	-1
$\chi_{15}^{(63)}$	-/G	-G	2	-2	/G	G	-/G	-G	2	-2	/G	G	/A	1	A	-A	-/A	-1	/A	1	A	-A	-/A	-1	1
$\chi_{15}^{(64)}$	-G	-/G	2	-2	G	/G	-G	-/G	2	-2	G	/G	A	1	/A	-/A	-A	-1	A	1	/A	-/A	-A	-1	1
$\chi_{15}^{(65)}$	-/G	-G	2	2	-/G	-G	/G	G	-2	-2	/G	G	/A	1	A	A	/A	1	-/A	-1	-A	-A	-/A	-1	1
$\chi_{15}^{(66)}$	-G	-/G	2	2	-G	-/G	G	/G	-2	-2	G	/G	A	1	/A	/A	A	1	-A	-1	-/A	-/A	-A	-1	1
$\chi_{15}^{(67)}$	-/G	-G	2	2	-/G	-G	/G	G	-2	-2	/G	G	/A	1	A	A	/A	1	-/A	-1	-A	-A	-/A	-1	-1
$\chi_{15}^{(68)}$	-G	-/G	2	2	-G	-/G	G	/G	-2	-2	G	/G	A	1	/A	/A	A	1	-A	-1	-/A	-/A	-A	-1	-1
$\chi_{15}^{(69)}$	-/G	-G	2	-2	/G	G	/G	G	-2	2	-/G	-G	/A	1	A	-A	-/A	-1	-/A	-1	-A	A	/A	1	1
$\chi_{15}^{(70)}$	-G	-/G	2	-2	G	/G	G	/G	-2	2	-G	-/G	A	1	/A	-/A	-A	-1	-A	-1	-/A	/A	A	1	1
$\chi_{15}^{(71)}$	-/G	-G	2	-2	/G	G	/G	G	-2	2	-/G	-G	/A	1	A	-A	-/A	-1	-/A	-1	-A	A	/A	1	-1
$\chi_{15}^{(72)}$	-G	-/G	2	-2	G	/G	G	/G	-2	2	-G	-/G	A	1	/A	-/A	-A	-1	-A	-1	-/A	/A	A	1	-1
$\chi_{15}^{(73)}$	.	.	.	.	.	.	.	.	.	.	.	.	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{15}^{(74)}$	.	.	.	.	.	.	.	.	.	.	.	.	1	1	1	1	1	1	1	1	1	1	1	1	-1
$\chi_{15}^{(75)}$	.	.	.	.	.	.	.	.	.	.	.	.	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	1
$\chi_{15}^{(76)}$	.	.	.	.	.	.	.	.	.	.	.	.	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	-1
$\chi_{15}^{(77)}$	.	.	.	.	.	.	.	.	.	.	.	.	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1
$\chi_{15}^{(78)}$	.	.	.	.	.	.	.	.	.	.	.	.	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	1
$\chi_{15}^{(79)}$	.	.	.	.	.	.	.	.	.	.	.	.	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1	-1
$\chi_{15}^{(80)}$	.	.	.	.	.	.	.	.	.	.	.	.	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1	1
$\chi_{15}^{(81)}$	.	.	.	.	.	.	.	.	.	.	.	.	/A	1	A	A	/A	1	/A	1	A	A	/A	1	1
$\chi_{15}^{(82)}$	.	.	.	.	.	.	.	.	.	.	.	.	A	1	/A	/A	A	1	A	1	/A	/A	A	1	1
$\chi_{15}^{(83)}$	.	.	.	.	.	.	.	.	.	.	.	.	/A	1	A	A	/A	1	/A	1	A	A	/A	1	-1
$\chi_{15}^{(84)}$	.	.	.	.	.	.	.	.	.	.	.	.	A	1	/A	/A	A	1	A	1	/A	/A	A	1	-1
$\chi_{15}^{(85)}$	.	.	.	.	.	.	.	.	.	.	.	.	/A	1	A	-A	-/A	-1	/A	1	A	-A	-/A	-1	1
$\chi_{15}^{(86)}$	.	.	.	.	.	.	.	.	.	.	.	.	A	1	/A	-/A	-A	-1	A	1	/A	-/A	-A	-1	1
$\chi_{15}^{(87)}$	/A	1	A	-A	-/A	-1	/A	1	A	-A	-/A	-1	-1
$\chi_{15}^{(88)}$	A	1	/A	-/A	-A	-1	A	1	/A	-/A	-A	-1	-1
$\chi_{15}^{(89)}$	/A	1	A	A	/A	1	-/A	-1	-A	-A	-/A	-1	-1
$\chi_{15}^{(90)}$	A	1	/A	/A	A	1	-A	-1	-/A	-/A	-A	-1	-1

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$\chi_{15}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{15}^{(2)}$	-1	-1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	-1
$\chi_{15}^{(3)}$	1	1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1	1
$\chi_{15}^{(4)}$	-1	-1	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	1
$\chi_{15}^{(5)}$	1	1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	-1
$\chi_{15}^{(6)}$	-1	-1	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1
$\chi_{15}^{(7)}$	1	1	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1
$\chi_{15}^{(8)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_{15}^{(9)}$	-A	-/A	/A	1	A	1	A	/A	-/A	-1	-A	-1	-A	-/A	/A	1	A	1	A	/A	-/A	-1	-A	-A
$\chi_{15}^{(10)}$	-/A	-A	A	1	/A	1	/A	A	-A	-1	-/A	-1	-/A	-A	A	1	/A	1	/A	A	-A	-1	-/A	-/A
$\chi_{15}^{(11)}$	A	/A	-/A	-1	-A	-1	-A	-/A	/A	1	A	1	A	/A	-/A	-1	-A	-1	-A	-/A	/A	1	A	A
$\chi_{15}^{(12)}$	/A	A	-A	-1	-/A	-1	-/A	-A	A	1	/A	1	/A	A	-A	-1	-/A	-1	-/A	-A	A	1	/A	/A
$\chi_{15}^{(13)}$	-A	-/A	/A	1	A	-1	-A	-/A	/A	1	A	-1	-A	-/A	/A	1	A	-1	-A	-/A	/A	1	A	A
$\chi_{15}^{(14)}$	-/A	-A	A	1	/A	-1	-/A	-A	A	1	/A	-1	-/A	-A	A	1	/A	-1	-/A	-A	A	1	/A	/A
$\chi_{15}^{(15)}$	A	/A	-/A	-1	-A	1	A	/A	-/A	-1	-A	1	A	/A	-/A	-1	-A	1	A	/A	-/A	-1	-A	-A
$\chi_{15}^{(16)}$	/A	A	-A	-1	-/A	1	/A	A	-A	-1	-/A	1	/A	A	-A	-1	-/A	1	/A	A	-A	-1	-/A	-/A
$\chi_{15}^{(17)}$	-A	-/A	-/A	-1	-A	1	A	/A	/A	1	A	-1	-A	-/A	-/A	-1	-A	1	A	/A	/A	1	A	A
$\chi_{15}^{(18)}$	-/A	-A	-A	-1	-/A	1	/A	A	A	1	/A	-1	-/A	-A	-A	-1	-/A	1	/A	A	A	1	/A	/A
$\chi_{15}^{(19)}$	A	/A	/A	1	A	-1	-A	-/A	-/A	-1	-A	1	A	/A	/A	1	A	-1	-A	-/A	-/A	-1	-A	-A
$\chi_{15}^{(20)}$	/A	A	A	1	/A	-1	-/A	-A	-A	-1	-/A	1	/A	A	A	1	/A	-1	-/A	-A	-A	-1	-/A	-/A
$\chi_{15}^{(21)}$	-A	-/A	-/A	-1	-A	-1	-A	-/A	-/A	-1	-A	-1	-A	-/A	-/A	-1	-A	-1	-A	-/A	-/A	-1	-A	-A
$\chi_{15}^{(22)}$	-/A	-A	-A	-1	-/A	-1	-/A	-A	-A	-1	-/A	-1	-/A	-A	-A	-1	-/A	-1	-/A	-A	-A	-1	-/A	-/A
$\chi_{15}^{(23)}$	A	/A	/A	1	A	1	A	/A	/A	1	A	1	A	/A	/A	1	A	1	A	/A	/A	1	A	A
$\chi_{15}^{(24)}$	/A	A	A	1	/A	1	/A	A	A	1	/A	1	/A	A	A	1	/A	1	/A	A	A	1	/A	/A
$\chi_{15}^{(25)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{15}^{(26)}$	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_{15}^{(27)}$	-1	-1	1	1	1	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	-1
$\chi_{15}^{(28)}$	1	1	-1	-1	-1	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	1
$\chi_{15}^{(29)}$	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1
$\chi_{15}^{(30)}$	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1
$\chi_{15}^{(31)}$	1	1	-1	-1	-1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	-1
$\chi_{15}^{(32)}$	-1	-1	1	1	1	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1	1
$\chi_{15}^{(33)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{15}^{(34)}$	1	1	1	1	1	1	1	1	1	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{15}^{(35)}$	-1	-1	1	1	1	-1	-1	-1	1	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{15}^{(36)}$	1	1	-1	-1	-1	1	1	1	-1	-1	-1	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{15}^{(37)}$	1	1	1	1	1	-1	-1	-1	-1	-1	-1	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{15}^{(38)}$	-1	-1	-1	-1	-1	1	1	1	1	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{15}^{(39)}$	1	1	-1	-1	-1	-1	-1	-1	1	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{15}^{(40)}$	-1	-1	1	1	1	1	1	1	-1	-1	-1	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{15}^{(41)}$	-A	-/A	-/A	-1	-A	-1	-A	-/A	-/A	-1	-A	1	A	/A	/A	1	A	1	A	/A	/A	1	A	A
$\chi_{15}^{(42)}$	-/A	-A	-A	-1	-/A	-1	-/A	-A	-A	-1	-/A	1	/A	A	A	1	/A	1	/A	A	A	1	/A	/A
$\chi_{15}^{(43)}$	A	/A	/A	1	A	1	A	/A	/A	1	A	-1	-A	-/A	-/A	-1	-A	-1	-A	-/A	-/A	-1	-A	-A
$\chi_{15}^{(44)}$	/A	-A	A	1	/A	1	/A	A	A	1	/A	-1	-/A	-A	-A	-1	-/A	-1	-/A	-A	-A	-1	-/A	-/A
$\chi_{15}^{(45)}$	-A	-/A	/A	1	A	-1	-A	-/A	/A	1	A	1	A	/A	-/A	-1	-A	1	A	/A	-/A	-1	-A	-A

[illegible]

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$\chi_{15}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{15}^{(2)}$	1	1	1	-1	-1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	1	-1	-1
$\chi_{15}^{(3)}$	1	1	1	-1	-1	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	-1	1	1
$\chi_{15}^{(4)}$	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	-1	-1	1	1	1	-1	-1	1
$\chi_{15}^{(5)}$	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	-1	-1	1	1	-1
$\chi_{15}^{(6)}$	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1
$\chi_{15}^{(7)}$	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	-1	-1	-1
$\chi_{15}^{(8)}$	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_{15}^{(9)}$	/A	1	A	-A	-/A	-1	-/A	-1	-A	A	/A	1	-A	-/A	-1	1	A	/A	A	/A
$\chi_{15}^{(10)}$	A	1	/A	-/A	-A	-1	-A	-1	-/A	/A	A	1	-/A	-A	-1	1	/A	A	/A	A
$\chi_{15}^{(11)}$	/A	1	A	-A	-/A	-1	-/A	-1	-A	A	/A	1	A	/A	1	-1	-A	-/A	-A	-/A
$\chi_{15}^{(12)}$	A	1	/A	-/A	-A	-1	-A	-1	-/A	/A	A	1	/A	A	1	-1	-/A	-A	-/A	-A
$\chi_{15}^{(13)}$	/A	1	A	-A	-/A	-1	/A	1	A	-A	-/A	-1	-A	-/A	-1	1	A	/A	-A	-/A
$\chi_{15}^{(14)}$	A	1	/A	-/A	-A	-1	A	1	/A	-/A	-A	-1	-/A	-A	-1	1	/A	A	-/A	-A
$\chi_{15}^{(15)}$	/A	1	A	-A	-/A	-1	/A	1	A	-A	-/A	-1	A	/A	1	-1	-A	-/A	A	/A
$\chi_{15}^{(16)}$	A	1	/A	-/A	-A	-1	A	1	/A	-/A	-A	-1	/A	A	1	-1	-/A	-A	/A	A
$\chi_{15}^{(17)}$	/A	1	A	A	/A	1	-/A	-1	-A	-A	-/A	-1	-A	-/A	-1	-1	-A	-/A	A	/A
$\chi_{15}^{(18)}$	A	1	/A	/A	A	1	-A	-1	-/A	-/A	-A	-1	-/A	-A	-1	-1	-/A	-A	/A	A
$\chi_{15}^{(19)}$	/A	1	A	A	/A	1	-/A	-1	-A	-A	-/A	-1	A	/A	1	1	A	/A	-A	-/A
$\chi_{15}^{(20)}$	A	1	/A	/A	A	1	-A	-1	-/A	-/A	-A	-1	/A	A	1	1	/A	A	-/A	-A
$\chi_{15}^{(21)}$	/A	1	A	A	/A	1	/A	1	A	A	/A	1	-A	-/A	-1	-1	-A	-/A	-A	-/A
$\chi_{15}^{(22)}$	A	1	/A	/A	A	1	A	1	/A	/A	A	1	-/A	-A	-1	-1	-/A	-A	-/A	-A
$\chi_{15}^{(23)}$	/A	1	A	A	/A	1	/A	1	A	A	/A	1	A	/A	1	1	A	/A	A	/A
$\chi_{15}^{(24)}$	A	1	/A	/A	A	1	A	1	/A	/A	A	1	/A	A	1	1	/A	A	/A	A
$\chi_{15}^{(25)}$	.	.	.	.	.	.	.	.	.	.	.	-3	-3	-3	-3	-3	-3	-3	-3	-3
$\chi_{15}^{(26)}$	.	.	.	.	.	.	.	.	.	.	.	3	3	3	3	3	3	3	3	3
$\chi_{15}^{(27)}$	.	.	.	.	.	.	.	.	.	.	.	-3	-3	-3	3	3	3	-3	-3	3
$\chi_{15}^{(28)}$	.	.	.	.	.	.	.	.	.	.	.	3	3	3	-3	-3	-3	3	3	-3
$\chi_{15}^{(29)}$	.	.	.	.	.	.	.	.	.	.	.	3	3	3	3	3	3	-3	-3	-3
$\chi_{15}^{(30)}$	.	.	.	.	.	.	.	.	.	.	.	-3	-3	-3	-3	-3	-3	3	3	3
$\chi_{15}^{(31)}$	.	.	.	.	.	.	.	.	.	.	.	3	3	3	-3	-3	-3	-3	-3	3
$\chi_{15}^{(32)}$	.	.	.	.	.	.	.	.	.	.	.	-3	-3	-3	3	3	3	3	3	-3
$\chi_{15}^{(33)}$	.	.	.	.	.	.	.	.	.	.	.	1	1	1	1	1	1	1	1	1
$\chi_{15}^{(34)}$	.	.	.	.	.	.	.	.	.	.	.	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_{15}^{(35)}$	.	.	.	.	.	.	.	.	.	.	.	1	1	1	-1	-1	-1	1	1	-1
$\chi_{15}^{(36)}$	.	.	.	.	.	.	.	.	.	.	.	-1	-1	-1	1	1	1	-1	-1	1
$\chi_{15}^{(37)}$	.	.	.	.	.	.	.	.	.	.	.	-1	-1	-1	-1	-1	-1	1	1	1
$\chi_{15}^{(38)}$	.	.	.	.	.	.	.	.	.	.	.	1	1	1	1	1	1	-1	-1	-1
$\chi_{15}^{(39)}$	.	.	.	.	.	.	.	.	.	.	.	-1	-1	-1	1	1	1	1	1	-1
$\chi_{15}^{(40)}$	.	.	.	.	.	.	.	.	.	.	.	1	1	1	-1	-1	-1	-1	-1	1
$\chi_{15}^{(41)}$	/F	F	-3	-3	/F	F	/F	F	-3
$\chi_{15}^{(42)}$	F	/F	-3	-3	F	/F	F	/F	-3
$\chi_{15}^{(43)}$	-/F	-F	3	3	-/F	-F	-/F	-F	3
$\chi_{15}^{(44)}$	-F	-/F	3	3	-F	-/F	-F	-/F	3
$\chi_{15}^{(45)}$	/F	F	-3	3	-/F	-F	/F	F	-3

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$\chi_{15}^{(46)}$	F	/F	-3	3	-F	-/F	F	/F	-3	3	-F	
$\chi_{15}^{(47)}$	-/F	-F	3	-3	/F	F	-/F	-F	3	-3	/F	
$\chi_{15}^{(48)}$	-F	-/F	3	-3	F	/F	-F	-/F	3	-3	F	
$\chi_{15}^{(49)}$	-/F	-F	3	3	-/F	-F	/F	F	-3	-3	/F	
$\chi_{15}^{(50)}$	.	.	.	.	.	.	.	.	.	.	.	.	-F	-/F	3	3	-F	-/F	F	/F	-3	-3	F
$\chi_{15}^{(51)}$	.	.	.	.	.	.	.	.	.	.	.	.	/F	F	-3	-3	/F	F	-/F	-F	3	3	-/F
$\chi_{15}^{(52)}$	.	.	.	.	.	.	.	.	.	.	.	.	F	/F	-3	-3	F	/F	-F	-/F	3	3	-F
$\chi_{15}^{(53)}$	.	.	.	.	.	.	.	.	.	.	.	.	-/F	-F	3	-3	/F	F	/F	F	-3	3	-/F
$\chi_{15}^{(54)}$	.	.	.	.	.	.	.	.	.	.	.	.	-F	-/F	3	-3	F	/F	F	/F	-3	3	-F
$\chi_{15}^{(55)}$	.	.	.	.	.	.	.	.	.	.	.	.	/F	F	-3	3	-/F	-F	-/F	-F	3	-3	/F
$\chi_{15}^{(56)}$	.	.	.	.	.	.	.	.	.	.	.	.	F	/F	-3	3	-F	-/F	-F	-/F	3	-3	F
$\chi_{15}^{(57)}$	.	.	.	.	.	.	.	.	.	.	.	.	A	/A	1	1	A	/A	A	/A	1	1	A
$\chi_{15}^{(58)}$	.	.	.	.	.	.	.	.	.	.	.	.	/A	A	1	1	/A	A	/A	A	1	1	/A
$\chi_{15}^{(59)}$	.	.	.	.	.	.	.	.	.	.	.	.	-A	-/A	-1	-1	-A	-/A	-A	-/A	-1	-1	-A
$\chi_{15}^{(60)}$	.	.	.	.	.	.	.	.	.	.	.	.	-/A	-A	-1	-1	-/A	-A	-/A	-A	-1	-1	-/A
$\chi_{15}^{(61)}$	.	.	.	.	.	.	.	.	.	.	.	.	A	/A	1	-1	-A	-/A	A	/A	1	-1	-A
$\chi_{15}^{(62)}$	.	.	.	.	.	.	.	.	.	.	.	.	/A	A	1	-1	-/A	-A	/A	A	1	-1	-/A
$\chi_{15}^{(63)}$	.	.	.	.	.	.	.	.	.	.	.	.	-A	-/A	-1	1	A	/A	-A	-/A	-1	1	A
$\chi_{15}^{(64)}$	.	.	.	.	.	.	.	.	.	.	.	.	-/A	-A	-1	1	/A	A	-/A	-A	-1	1	/A
$\chi_{15}^{(65)}$	.	.	.	.	.	.	.	.	.	.	.	.	-A	-/A	-1	-1	-A	-/A	A	/A	1	1	A
$\chi_{15}^{(66)}$	.	.	.	.	.	.	.	.	.	.	.	.	-/A	-A	-1	-1	-/A	-A	/A	A	1	1	/A
$\chi_{15}^{(67)}$	.	.	.	.	.	.	.	.	.	.	.	.	A	/A	1	1	A	/A	-A	-/A	-1	-1	-A
$\chi_{15}^{(68)}$	.	.	.	.	.	.	.	.	.	.	.	.	/A	A	1	1	/A	A	-/A	-A	-1	-1	-/A
$\chi_{15}^{(69)}$	.	.	.	.	.	.	.	.	.	.	.	.	-A	-/A	-1	1	A	/A	A	/A	1	-1	-A
$\chi_{15}^{(70)}$	.	.	.	.	.	.	.	.	.	.	.	.	-/A	-A	-1	1	/A	A	/A	A	1	-1	-/A
$\chi_{15}^{(71)}$	.	.	.	.	.	.	.	.	.	.	.	.	A	/A	1	-1	-A	-/A	-A	-/A	-1	1	A
$\chi_{15}^{(72)}$	.	.	.	.	.	.	.	.	.	.	.	.	/A	A	1	-1	-/A	-A	-/A	-A	-1	1	/A
$\chi_{15}^{(73)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	
$\chi_{15}^{(74)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	3	3	3	3	3	3	3	3	3	3	3	
$\chi_{15}^{(75)}$	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	-3	-3	-3	3	3	3	-3	-3	-3	3	3	
$\chi_{15}^{(76)}$	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	3	3	3	-3	-3	-3	3	3	3	-3	-3	
$\chi_{15}^{(77)}$	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	3	3	3	3	3	3	-3	-3	-3	-3	-3	
$\chi_{15}^{(78)}$	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	-3	-3	-3	-3	-3	-3	3	3	3	3	3	
$\chi_{15}^{(79)}$	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	3	3	3	-3	-3	-3	-3	-3	-3	3	3	
$\chi_{15}^{(80)}$	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	-3	-3	-3	3	3	3	3	3	3	-3	-3	
$\chi_{15}^{(81)}$	-/A	-1	-A	-A	-/A	-1	-/A	-1	-A	-A	-/A	-1	/F	F	-3	-3	/F	F	/F	F	-3	-3	/F	
$\chi_{15}^{(82)}$	-A	-1	-/A	-/A	-A	-1	-A	-1	-/A	-/A	-A	-1	F	/F	-3	-3	F	/F	F	/F	-3	-3	F	
$\chi_{15}^{(83)}$	-/A	-1	-A	-A	-/A	-1	-/A	-1	-A	-A	-/A	-1	-/F	-F	3	3	-/F	-F	-/F	-F	3	3	-/F	
$\chi_{15}^{(84)}$	-A	-1	-/A	-/A	-A	-1	-A	-1	-/A	-/A	-A	-1	-F	-/F	3	3	-F	-/F	-F	-/F	3	3	-F	
$\chi_{15}^{(85)}$	-/A	-1	-A	A	/A	1	-/A	-1	-A	A	/A	1	/F	F	-3	3	-/F	-F	/F	F	-3	3	-/F	
$\chi_{15}^{(86)}$	-A	-1	-/A	/A	A	1	-A	-1	-/A	/A	A	1	F	/F	-3	3	-F	-/F	F	/F	-3	3	-F	
$\chi_{15}^{(87)}$	-/A	-1	-A	A	/A	1	-/A	-1	-A	A	/A	1	-/F	-F	3	-3	/F	F	-/F	-F	3	-3	/F	
$\chi_{15}^{(88)}$	-A	-1	-/A	/A	A	1	-A	-1	-/A	/A	A	1	-F	-/F	3	-3	F	/F	-F	-/F	3	-3	F	
$\chi_{15}^{(89)}$	-/A	-1	-A	-A	-/A	-1	/A	1	A	A	/A	1	-/F	-F	3	3	-/F	-F	/F	F	-3	-3	/F	
$\chi_{15}^{(90)}$	-A	-1	-/A	-/A	-A	-1	A	1	/A	/A	A	1	-F	-/F	3	3	-F	-/F	F	/F	-3	-3	F	

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$\chi_{15}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{15}^{(2)}$	-1	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	1
$\chi_{15}^{(3)}$	1	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	1
$\chi_{15}^{(4)}$	1	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	-1
$\chi_{15}^{(5)}$	-1	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	-1
$\chi_{15}^{(6)}$	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1
$\chi_{15}^{(7)}$	-1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1
$\chi_{15}^{(8)}$	-1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{15}^{(9)}$	-/A	1	A	/A	-/A	-1	-A	-1	-A	-/A	/A	1	A	1	A	/A	-/A	-1	-A	-1	-A	-/A
$\chi_{15}^{(10)}$	-A	1	/A	A	-A	-1	-/A	-1	-/A	-A	A	1	/A	1	/A	A	-A	-1	-/A	-1	-/A	-A
$\chi_{15}^{(11)}$	/A	1	A	/A	-/A	-1	-A	-1	-A	-/A	/A	1	A	1	A	/A	-/A	-1	-A	-1	-A	-/A
$\chi_{15}^{(12)}$	A	1	/A	A	-A	-1	-/A	-1	-/A	-A	A	1	/A	1	/A	A	-A	-1	-/A	-1	-/A	-A
$\chi_{15}^{(13)}$	/A	1	A	/A	-/A	-1	-A	1	A	/A	-/A	-1	-A	1	A	/A	-/A	-1	-A	1	A	/A
$\chi_{15}^{(14)}$	A	1	/A	A	-A	-1	-/A	1	/A	A	-A	-1	-/A	1	/A	A	-A	-1	-/A	1	/A	-A
$\chi_{15}^{(15)}$	-/A	1	A	/A	-/A	-1	-A	1	A	/A	-/A	-1	-A	1	A	/A	-/A	-1	-A	1	A	/A
$\chi_{15}^{(16)}$	-A	1	/A	A	-A	-1	-/A	1	/A	A	-A	-1	-/A	1	/A	A	-A	-1	-/A	1	/A	-A
$\chi_{15}^{(17)}$	/A	1	A	/A	/A	1	A	-1	-A	-/A	-/A	-1	-A	1	A	/A	/A	1	A	-1	-A	-/A
$\chi_{15}^{(18)}$	A	1	/A	A	A	1	/A	-1	-/A	-A	-A	-1	-/A	1	/A	A	A	1	/A	-1	-/A	-A
$\chi_{15}^{(19)}$	-/A	1	A	/A	/A	1	A	-1	-A	-/A	-/A	-1	-A	1	A	/A	/A	1	A	-1	-A	-/A
$\chi_{15}^{(20)}$	-A	1	/A	A	A	1	/A	-1	-/A	-A	-A	-1	-/A	1	/A	A	A	1	/A	-1	-/A	-A
$\chi_{15}^{(21)}$	-/A	1	A	/A	/A	1	A	1	A	/A	/A	1	A	1	A	/A	/A	1	A	1	A	/A
$\chi_{15}^{(22)}$	-A	1	/A	A	A	1	/A	1	/A	A	A	1	/A	1	/A	A	A	1	/A	1	/A	A
$\chi_{15}^{(23)}$	/A	1	A	/A	/A	1	A	1	A	/A	/A	1	A	1	A	/A	/A	1	A	1	A	/A
$\chi_{15}^{(24)}$	A	1	/A	A	A	1	/A	1	/A	A	A	1	/A	1	/A	A	A	1	/A	1	/A	A
$\chi_{15}^{(25)}$	-3	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	2	2	2	2	2	2	2	2	2
$\chi_{15}^{(26)}$	3	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	2	2	2	2	2	2	2	2	2
$\chi_{15}^{(27)}$	3	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	2	2	2	-2	-2	-2	2	2	-2
$\chi_{15}^{(28)}$	-3	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	2	2	2	-2	-2	-2	2	2	-2
$\chi_{15}^{(29)}$	-3	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	2	2	2	2	2	2	-2	-2	-2
$\chi_{15}^{(30)}$	3	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	2	2	2	2	2	2	-2	-2	-2
$\chi_{15}^{(31)}$	3	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	2	2	2	-2	-2	-2	-2	-2	2
$\chi_{15}^{(32)}$	-3	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	2	2	2	-2	-2	-2	-2	-2	2
$\chi_{15}^{(33)}$	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_{15}^{(34)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_{15}^{(35)}$	-1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	-1	-1	1
$\chi_{15}^{(36)}$	1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	-1	-1	1
$\chi_{15}^{(37)}$	1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1
$\chi_{15}^{(38)}$	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1
$\chi_{15}^{(39)}$	-1	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	-1
$\chi_{15}^{(40)}$	1	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	-1
$\chi_{15}^{(41)}$	F	-1	-A	-/A	-/A	-1	-A	-1	-A	-/A	-/A	-1	-A	2	-/G	-G	-G	2	-/G	2	-/G	-G
$\chi_{15}^{(42)}$	/F	-1	-/A	-A	-A	-1	-/A	-1	-/A	-A	-A	-1	-/A	2	-G	-/G	-/G	2	-G	2	-G	-/G
$\chi_{15}^{(43)}$	-F	-1	-A	-/A	-/A	-1	-A	-1	-A	-/A	-/A	-1	-A	2	-/G	-G	-G	2	-/G	2	-G	-G
$\chi_{15}^{(44)}$	-/F	-1	-/A	-A	-A	-1	-/A	-1	-/A	-A	-A	-1	-/A	2	-G	-/G	-/G	2	-G	2	-G	-/G
$\chi_{15}^{(45)}$	-F	-1	-A	-/A	/A	1	A	-1	-A	-/A	/A	1	A	2	-/G	-G	G	-2	/G	2	-/G	G

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$\chi_{15}^{(46)}$	-/F	-1	-/A	-A	A	1	/A	-1	-/A	-A	A	1	/A	2	-G	-/G	/G	-2	G	2	-G	-/G	/G
$\chi_{15}^{(47)}$	F	-1	-A	-/A	/A	1	A	-1	-A	-/A	/A	1	A	2	-/G	-G	G	-2	/G	2	-/G	-G	G
$\chi_{15}^{(48)}$	/F	-1	-/A	-A	A	1	/A	-1	-/A	-A	A	1	/A	2	-G	-/G	/G	-2	G	2	-G	-/G	/G
$\chi_{15}^{(49)}$	F	-1	-A	-/A	-/A	-1	-A	1	A	/A	/A	1	A	2	-/G	-G	-G	2	-/G	-2	/G	G	G
$\chi_{15}^{(50)}$	/F	-1	-/A	-A	-A	-1	-/A	1	/A	A	A	1	/A	2	-G	-/G	-/G	2	-G	-2	G	/G	/G
$\chi_{15}^{(51)}$	-F	-1	-A	-/A	-/A	-1	-A	1	A	/A	/A	1	A	2	-/G	-G	-G	2	-/G	-2	/G	G	G
$\chi_{15}^{(52)}$	-/F	-1	-/A	-A	-A	-1	-/A	1	/A	A	A	1	/A	2	-G	-/G	-/G	2	-G	-2	G	/G	/G
$\chi_{15}^{(53)}$	-F	-1	-A	-/A	/A	1	A	1	A	/A	-/A	-1	-A	2	-/G	-G	G	-2	/G	-2	/G	G	-G
$\chi_{15}^{(54)}$	-/F	-1	-/A	-A	A	1	/A	1	/A	A	-A	-1	-/A	2	-G	-/G	/G	-2	G	-2	G	/G	-/G
$\chi_{15}^{(55)}$	F	-1	-A	-/A	/A	1	A	1	A	/A	-/A	-1	-A	2	-/G	-G	G	-2	/G	-2	/G	G	-G
$\chi_{15}^{(56)}$	/F	-1	-/A	-A	A	1	/A	1	/A	A	-A	-1	-/A	2	-G	-/G	/G	-2	G	-2	G	/G	-/G
$\chi_{15}^{(57)}$	/A	-1	-A	-/A	-/A	-1	-A	-1	-A	-/A	-/A	-1	-A	-1	-A	-/A	-/A	-1	-A	-1	-A	-/A	-/A
$\chi_{15}^{(58)}$	A	-1	-/A	-A	-A	-1	-/A	-1	-/A	-A	-A	-1	-/A	-1	-/A	-A	-A	-1	-/A	-1	-/A	-A	-A
$\chi_{15}^{(59)}$	-/A	-1	-A	-/A	-/A	-1	-A	-1	-A	-/A	-/A	-1	-A	-1	-A	-/A	-/A	-1	-A	-1	-A	-/A	-/A
$\chi_{15}^{(60)}$	-A	-1	-/A	-A	-A	-1	-/A	-1	-/A	-A	-A	-1	-/A	-1	-/A	-A	-A	-1	-/A	-1	-/A	-A	-A
$\chi_{15}^{(61)}$	-/A	-1	-A	-/A	/A	1	A	-1	-A	-/A	/A	1	A	-1	-A	-/A	/A	1	A	-1	-A	-/A	/A
$\chi_{15}^{(62)}$	-A	-1	-/A	-A	A	1	/A	-1	-/A	-A	A	1	/A	-1	-/A	-A	A	1	/A	-1	-/A	-A	A
$\chi_{15}^{(63)}$	/A	-1	-A	-/A	/A	1	A	-1	-A	-/A	/A	1	A	-1	-A	-/A	/A	1	A	-1	-A	-/A	/A
$\chi_{15}^{(64)}$	A	-1	-/A	-A	A	1	/A	-1	-/A	-A	A	1	/A	-1	-/A	-A	A	1	/A	-1	-/A	-A	A
$\chi_{15}^{(65)}$	/A	-1	-A	-/A	-/A	-1	-A	1	A	/A	/A	1	A	-1	-A	-/A	-/A	-1	-A	1	A	/A	/A
$\chi_{15}^{(66)}$	A	-1	-/A	-A	-A	-1	-/A	1	/A	A	A	1	/A	-1	-/A	-A	-A	-1	-/A	1	/A	A	A
$\chi_{15}^{(67)}$	-/A	-1	-A	-/A	-/A	-1	-A	1	A	/A	/A	1	A	-1	-A	-/A	-/A	-1	-A	1	A	/A	/A
$\chi_{15}^{(68)}$	-A	-1	-/A	-A	-A	-1	-/A	1	/A	A	A	1	/A	-1	-/A	-A	-A	-1	-/A	1	/A	A	A
$\chi_{15}^{(69)}$	-/A	-1	-A	-/A	/A	1	A	1	A	/A	-/A	-1	-A	-1	-A	-/A	/A	1	A	1	A	/A	-/A
$\chi_{15}^{(70)}$	-A	-1	-/A	-A	A	1	/A	1	/A	A	-A	-1	-/A	-1	-/A	-A	A	1	/A	1	/A	A	-A
$\chi_{15}^{(71)}$	/A	-1	-A	-/A	/A	1	A	1	A	/A	-/A	-1	-A	-1	-A	-/A	/A	1	A	1	A	/A	-/A
$\chi_{15}^{(72)}$	A	-1	-/A	-A	A	1	/A	1	/A	A	-A	-1	-/A	-1	-/A	-A	A	1	/A	1	/A	A	-A
$\chi_{15}^{(73)}$	-3	1	1	1	1	1	1	1	1	1	1	1	1	.	.	.	.	.	.	.	.	.
$\chi_{15}^{(74)}$	3	1	1	1	1	1	1	1	1	1	1	1	1	.	.	.	.	.	.	.	.	.
$\chi_{15}^{(75)}$	3	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	.	.	.	.	.	.	.	.	.
$\chi_{15}^{(76)}$	-3	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	.	.	.	.	.	.	.	.	.
$\chi_{15}^{(77)}$	-3	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	.	.	.	.	.	.	.	.	.
$\chi_{15}^{(78)}$	3	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	.	.	.	.	.	.	.	.	.
$\chi_{15}^{(79)}$	3	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1	.	.	.	.	.	.	.	.	.
$\chi_{15}^{(80)}$	-3	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1	.	.	.	.	.	.	.	.	.
$\chi_{15}^{(81)}$	F	1	A	/A	/A	1	A	1	A	/A	/A	1	A	.	.	.	.	.	.	.	.	.
$\chi_{15}^{(82)}$	/F	1	/A	A	A	1	/A	1	/A	A	A	1	/A	.	.	.	.	.	.	.	.	.
$\chi_{15}^{(83)}$	-F	1	A	/A	/A	1	A	1	A	/A	/A	1	A	.	.	.	.	.	.	.	.	.
$\chi_{15}^{(84)}$	-/F	1	/A	A	A	1	/A	1	/A	A	A	1	/A	.	.	.	.	.	.	.	.	.
$\chi_{15}^{(85)}$	-F	1	A	/A	-/A	-1	-A	1	A	/A	-/A	-1	-A	.	.	.	.	.	.	.	.	.
$\chi_{15}^{(86)}$	-/F	1	/A	A	-A	-1	-/A	1	/A	A	-A	-1	-/A	.	.	.	.	.	.	.	.	.
$\chi_{15}^{(87)}$	F	1	A	/A	-/A	-1	-A	1	A	/A	-/A	-1	-A	
$\chi_{15}^{(88)}$	/F	1	/A	A	-A	-1	-/A	1	/A	A	-A	-1	-/A	
$\chi_{15}^{(89)}$	F	1	A	/A	/A	1	A	-1	-A	-/A	-/A	-1	-A	
$\chi_{15}^{(90)}$	/F	1	/A	A	A	1	/A	-1	-/A	-A	-A	-1	-/A	

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$\chi_{15}^{(91)}$	-F	1	A	/A	/A	1	A	-1	-A	-/A	-/A	-1	-A
$\chi_{15}^{(92)}$	-/F	1	/A	A	A	1	/A	-1	-/A	-A	-A	-1	-/A
$\chi_{15}^{(93)}$	-F	1	A	/A	-/A	-1	-A	-1	-A	-/A	/A	1	A
$\chi_{15}^{(94)}$	-/F	1	/A	A	-A	-1	-/A	-1	-/A	-A	A	1	/A
$\chi_{15}^{(95)}$	F	1	A	/A	-/A	-1	-A	-1	-A	-/A	/A	1	A	.	.	.	.	.	.	.	.	.	.	.
$\chi_{15}^{(96)}$	/F	1	/A	A	-A	-1	-/A	-1	-/A	-A	A	1	/A	.	.	.	.	.	.	.	.	.	.	.
$\chi_{15}^{(97)}$	2	.	.	.	.	.	.	.	.	.	.	.	.	1	1	1	1	1	1	1	1	1	1	1
$\chi_{15}^{(98)}$	-2	.	.	.	.	.	.	.	.	.	.	.	.	1	1	1	1	1	1	1	1	1	1	1
$\chi_{15}^{(99)}$	-2	.	.	.	.	.	.	.	.	.	.	.	.	1	1	1	-1	-1	-1	1	1	1	1	-1
$\chi_{15}^{(100)}$	2	.	.	.	.	.	.	.	.	.	.	.	.	1	1	1	-1	-1	-1	1	1	1	1	-1
$\chi_{15}^{(101)}$	2	.	.	.	.	.	.	.	.	.	.	.	.	1	1	1	1	1	1	-1	-1	-1	-1	-1
$\chi_{15}^{(102)}$	-2	.	.	.	.	.	.	.	.	.	.	.	.	1	1	1	1	1	1	-1	-1	-1	-1	-1
$\chi_{15}^{(103)}$	-2	.	.	.	.	.	.	.	.	.	.	.	.	1	1	1	-1	-1	-1	-1	-1	-1	-1	1
$\chi_{15}^{(104)}$	2	.	.	.	.	.	.	.	.	.	.	.	.	1	1	1	-1	-1	-1	-1	-1	-1	-1	1
$\chi_{15}^{(105)}$	-G	.	.	.	.	.	.	.	.	.	.	.	.	1	A	/A	/A	1	A	1	A	/A	/A	/A
$\chi_{15}^{(106)}$	-/G	.	.	.	.	.	.	.	.	.	.	.	.	1	/A	A	A	1	/A	1	/A	A	A	A
$\chi_{15}^{(107)}$	G	.	.	.	.	.	.	.	.	.	.	.	.	1	A	/A	/A	1	A	1	A	/A	/A	/A
$\chi_{15}^{(108)}$	/G	.	.	.	.	.	.	.	.	.	.	.	.	1	/A	A	A	1	/A	1	/A	A	A	A
$\chi_{15}^{(109)}$	G	.	.	.	.	.	.	.	.	.	.	.	.	1	A	/A	-/A	-1	-A	1	A	/A	-/A	-/A
$\chi_{15}^{(110)}$	/G	.	.	.	.	.	.	.	.	.	.	.	.	1	/A	A	-A	-1	-/A	1	/A	A	-A	-A
$\chi_{15}^{(111)}$	-G	.	.	.	.	.	.	.	.	.	.	.	.	1	A	/A	-/A	-1	-A	1	A	/A	-/A	-/A
$\chi_{15}^{(112)}$	-/G	.	.	.	.	.	.	.	.	.	.	.	.	1	/A	A	-A	-1	-/A	1	/A	A	-A	-A
$\chi_{15}^{(113)}$	-G	.	.	.	.	.	.	.	.	.	.	.	.	1	A	/A	/A	1	A	-1	-A	-/A	-/A	-/A
$\chi_{15}^{(114)}$	-/G	.	.	.	.	.	.	.	.	.	.	.	.	1	/A	A	A	1	/A	-1	-/A	-A	-A	-A
$\chi_{15}^{(115)}$	G	.	.	.	.	.	.	.	.	.	.	.	.	1	A	/A	/A	1	A	-1	-A	-/A	-/A	-/A
$\chi_{15}^{(116)}$	/G	.	.	.	.	.	.	.	.	.	.	.	.	1	/A	A	A	1	/A	-1	-/A	-A	-A	-A
$\chi_{15}^{(117)}$	G	.	.	.	.	.	.	.	.	.	.	.	.	1	A	/A	-/A	-1	-A	-1	-A	-/A	/A	/A
$\chi_{15}^{(118)}$	/G	.	.	.	.	.	.	.	.	.	.	.	.	1	/A	A	-A	-1	-/A	-1	-/A	-A	A	A
$\chi_{15}^{(119)}$	-G	.	.	.	.	.	.	.	.	.	.	.	.	1	A	/A	-/A	-1	-A	-1	-A	-/A	/A	/A
$\chi_{15}^{(120)}$	-/G	.	.	.	.	.	.	.	.	.	.	.	.	1	/A	A	-A	-1	-/A	-1	-/A	-A	A	A
$\chi_{15}^{(121)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
$\chi_{15}^{(122)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	-2	-2	-2	2	2	2	-2	-2	-2	2	2
$\chi_{15}^{(123)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	-2	-2	-2	-2	-2	-2	2	2	2	2	2
$\chi_{15}^{(124)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	-2	-2	-2	2	2	2	2	2	2	2	-2
$\chi_{15}^{(125)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	-2	/G	G	G	-2	/G	-2	/G	G	G	G
$\chi_{15}^{(126)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	-2	G	/G	/G	-2	G	-2	G	/G	/G	/G
$\chi_{15}^{(127)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	-2	/G	G	-G	2	-/G	-2	/G	G	-G	-G
$\chi_{15}^{(128)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	-2	G	/G	-/G	2	-G	-2	G	/G	-/G	-/G
$\chi_{15}^{(129)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	-2	/G	G	G	-2	/G	2	-/G	-G	-G	-G
$\chi_{15}^{(130)}$	-2	G	/G	/G	-2	G	2	-G	-/G	-/G	-/G
$\chi_{15}^{(131)}$	-2	/G	G	-G	2	-/G	2	-/G	-G	G	G
$\chi_{15}^{(132)}$	-2	G	/G	-/G	2	-G	2	-G	-/G	/G	/G

[illegible]

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$\chi_{15}^{(91)}$
$\chi_{15}^{(92)}$
$\chi_{15}^{(93)}$
$\chi_{15}^{(94)}$
$\chi_{15}^{(95)}$
$\chi_{15}^{(96)}$
$\chi_{15}^{(97)}$	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_{15}^{(98)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{15}^{(99)}$	-1	-1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1
$\chi_{15}^{(100)}$	-1	-1	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1
$\chi_{15}^{(101)}$	-1	-1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1
$\chi_{15}^{(102)}$	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1
$\chi_{15}^{(103)}$	1	1	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1
$\chi_{15}^{(104)}$	1	1	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1
$\chi_{15}^{(105)}$	1	A	-/A	-1	-A	-A	-/A	-1	-/A	-1	-A	-A	-/A	-1
$\chi_{15}^{(106)}$	1	/A	-A	-1	-/A	-/A	-A	-1	-A	-1	-/A	-/A	-A	-1
$\chi_{15}^{(107)}$	1	A	/A	1	A	A	/A	1	/A	1	A	A	/A	1
$\chi_{15}^{(108)}$	1	/A	A	1	/A	/A	A	1	A	1	/A	/A	A	1
$\chi_{15}^{(109)}$	-1	-A	-/A	-1	-A	A	/A	1	-/A	-1	-A	A	/A	1
$\chi_{15}^{(110)}$	-1	-/A	-A	-1	-/A	/A	A	1	-A	-1	-/A	/A	A	1
$\chi_{15}^{(111)}$	-1	-A	/A	1	A	-A	-/A	-1	/A	1	A	-A	-/A	-1
$\chi_{15}^{(112)}$	-1	-/A	A	1	/A	-/A	-A	-1	A	1	/A	-/A	-A	-1
$\chi_{15}^{(113)}$	-1	-A	/A	1	A	A	/A	1	-/A	-1	-A	-A	-/A	-1
$\chi_{15}^{(114)}$	-1	-/A	A	1	/A	/A	A	1	-A	-1	-/A	-/A	-A	-1
$\chi_{15}^{(115)}$	-1	-A	-/A	-1	-A	-A	-/A	-1	/A	1	A	A	/A	1
$\chi_{15}^{(116)}$	-1	-/A	-A	-1	-/A	-/A	-A	-1	A	1	/A	/A	A	1
$\chi_{15}^{(117)}$	1	A	/A	1	A	-A	-/A	-1	-/A	-1	-A	A	/A	1
$\chi_{15}^{(118)}$	1	/A	A	1	/A	-/A	-A	-1	-A	-1	-/A	/A	A	1
$\chi_{15}^{(119)}$	1	A	-/A	-1	-A	A	/A	1	/A	1	A	-A	-/A	-1
$\chi_{15}^{(120)}$	1	/A	-A	-1	-/A	/A	A	1	A	1	/A	-/A	-A	-1
$\chi_{15}^{(121)}$	-2	-2	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{15}^{(122)}$	2	2	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{15}^{(123)}$	2	2	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{15}^{(124)}$	-2	-2	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{15}^{(125)}$	-2	/G	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{15}^{(126)}$	-2	G	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{15}^{(127)}$	2	-/G	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{15}^{(128)}$	2	-G	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{15}^{(129)}$	2	-/G	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{15}^{(130)}$	2	-G	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{15}^{(131)}$	-2	/G	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{15}^{(132)}$	-2	G	.	.	.	.	.	.	.	.	.	.	.	.

where $A = E(3)^2 = (-1-ER(-3))/2 = -1-b3$, $B = 5^*E(3)^2 = (-5-5^*ER(-3))/2 = -5-5b3$, $C = 9^*E(3)^2 = (-9-9^*ER(-3))/2 = -9-9b3$, $D = 10^*E(3)^2 = -5-5^*ER(-3) = -5-5i3$, $E = 16^*E(3)^2 = -8-8^*ER(-3) = -8-8i3$, $F = -3^*E(3) = (3-3^*ER(-3))/2 = -3b3$, $G = -2^*E(3) = 1-ER(-3) = 1-i3$.

The generators of $G^{s_{16}}$ are:

$$\begin{pmatrix} -1 & 1 & 1 & -1 & -1 & 1 & 1 & 0 \\ -1 & 2 & 1 & -1 & -2 & 1 & 2 & -1 \\ -2 & 2 & 2 & -2 & -2 & 2 & 2 & -1 \\ -2 & 3 & 2 & -2 & -4 & 3 & 3 & -1 \\ -2 & 2 & 2 & -1 & -4 & 3 & 2 & -1 \\ -2 & 2 & 2 & -1 & -3 & 2 & 1 & 0 \\ -1 & 1 & 2 & -1 & -2 & 1 & 1 & 0 \\ 0 & 1 & 1 & -1 & -1 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 & -1 & 2 & -2 & 0 & 0 & 1 \\ 1 & 0 & -1 & 2 & -3 & 1 & -1 & 2 \\ 1 & 0 & -1 & 3 & -4 & 0 & 0 & 2 \\ 1 & 0 & -1 & 4 & -6 & 1 & -1 & 3 \\ 1 & 0 & -1 & 3 & -5 & 1 & 0 & 2 \\ 1 & 0 & -1 & 2 & -3 & 0 & 0 & 2 \\ 1 & 1 & -1 & 1 & -2 & 0 & 0 & 1 \\ 1 & 0 & -1 & 1 & -1 & 0 & 0 & 0 \end{pmatrix}.$$

The representatives of conjugacy classes of $G^{s_{16}}$ are:

$$\begin{pmatrix} 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} -2 & -1 & 1 & 1 & -1 & 1 & 0 & -1 \\ -2 & -2 & 1 & 2 & -2 & 1 & 1 & -2 \\ -3 & -2 & 1 & 3 & -3 & 2 & 0 & -2 \\ -4 & -3 & 2 & 4 & -5 & 3 & 1 & -3 \\ -3 & -2 & 1 & 3 & -4 & 3 & 1 & -3 \\ -3 & -1 & 1 & 2 & -3 & 2 & 1 & -2 \\ -2 & -1 & 1 & 1 & -2 & 2 & 0 & -1 \\ -1 & 0 & 1 & 0 & -1 & 1 & 0 & -1 \end{pmatrix}, \begin{pmatrix} -1 & -2 & 0 & 2 & -1 & 0 & 1 & -1 \\ -2 & -3 & 1 & 2 & -1 & 0 & 1 & 0 \\ -2 & -4 & 0 & 4 & -2 & 0 & 1 & 0 \\ -4 & -5 & 1 & 5 & -3 & 0 & 2 & 0 \\ -3 & -4 & 0 & 4 & -2 & 0 & 2 & 0 \\ -2 & -3 & 0 & 3 & -2 & 0 & 2 & 0 \\ -2 & -2 & 0 & 2 & -1 & 0 & 1 & 0 \\ -1 & -1 & 0 & 1 & 0 & -1 & 1 & 0 \end{pmatrix},$$

$$\begin{pmatrix} -1 & -2 & 0 & 2 & -1 & 0 & 1 & -1 \\ -1 & -3 & 1 & 2 & -2 & 1 & 1 & -1 \\ -1 & -4 & 0 & 4 & -3 & 1 & 1 & -1 \\ -2 & -5 & 1 & 5 & -5 & 2 & 2 & -2 \\ -1 & -4 & 0 & 4 & -4 & 2 & 2 & -2 \\ -1 & -3 & 0 & 3 & -3 & 1 & 2 & -1 \\ -1 & -2 & 0 & 2 & -2 & 1 & 1 & -1 \\ 0 & -1 & 0 & 1 & -1 & 0 & 1 & -1 \end{pmatrix}, \begin{pmatrix} -1 & -2 & 1 & 1 & -1 & 1 & 0 & 0 \\ -3 & -2 & 2 & 1 & -1 & 1 & 0 & 0 \\ -3 & -3 & 2 & 2 & -2 & 2 & -1 & 1 \\ -5 & -4 & 3 & 3 & -3 & 2 & 0 & 1 \\ -4 & -3 & 2 & 2 & -2 & 2 & 0 & 1 \\ -3 & -2 & 2 & 1 & -2 & 2 & 0 & 1 \\ -2 & -2 & 1 & 1 & -1 & 1 & 0 & 1 \\ -1 & -1 & 1 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} -1 & -2 & 1 & 1 & -1 & 1 & 0 & 0 \\ -2 & -2 & 2 & 1 & -2 & 2 & 0 & -1 \\ -2 & -3 & 2 & 2 & -3 & 3 & -1 & 0 \\ -3 & -4 & 3 & 3 & -5 & 4 & 0 & -1 \\ -2 & -3 & 2 & 2 & -4 & 4 & 0 & -1 \\ -2 & -2 & 2 & 1 & -3 & 3 & 0 & 0 \\ -1 & -2 & 1 & 1 & -2 & 2 & 0 & 0 \\ 0 & -1 & 1 & 0 & -1 & 1 & 0 & 0 \end{pmatrix},$$

$$\begin{pmatrix} -1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ -1 & -1 & 0 & 0 & 1 & -1 & 0 & 1 \\ -1 & 0 & -1 & 0 & 1 & -1 & 0 & 1 \\ -2 & 0 & 0 & -1 & 2 & -2 & 0 & 2 \\ -2 & 0 & 0 & 0 & 1 & -2 & 0 & 2 \\ -1 & 0 & 0 & 0 & 1 & -2 & 0 & 1 \\ -1 & 0 & 0 & 0 & 1 & -1 & -1 & 1 \\ -1 & 0 & 0 & 0 & 1 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & -1 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & -1 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & -1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & -1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & -1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & -1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 1 & -1 & 0 & 1 & -1 & 1 \\ -2 & 0 & 1 & -1 & 1 & 0 & -1 & 1 \\ -2 & 1 & 1 & -2 & 1 & 1 & -2 & 2 \\ -3 & 1 & 2 & -3 & 2 & 0 & -2 & 3 \\ -3 & 1 & 2 & -2 & 1 & 0 & -2 & 3 \\ -2 & 1 & 2 & -2 & 1 & 0 & -2 & 2 \\ -1 & 0 & 1 & -1 & 1 & 0 & -2 & 2 \\ -1 & 0 & 1 & -1 & 1 & 0 & -1 & 1 \end{pmatrix},$$

$$\begin{pmatrix} -1 & 0 & 1 & -1 & 0 & 1 & -1 & 1 \\ -1 & 0 & 1 & -1 & 0 & 1 & -1 & 0 \\ -1 & 1 & 1 & -2 & 0 & 2 & -2 & 1 \\ -1 & 1 & 2 & -3 & 0 & 2 & -2 & 1 \\ -1 & 1 & 2 & -2 & -1 & 2 & -2 & 1 \\ -1 & 1 & 2 & -2 & 0 & 1 & -2 & 1 \\ 0 & 0 & 1 & -1 & 0 & 1 & -2 & 1 \\ 0 & 0 & 1 & -1 & 0 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 1 & 0 & 0 & -1 & 0 & 2 & -1 \\ -1 & 1 & 0 & 0 & -1 & -1 & 3 & 0 \\ -2 & 1 & 0 & 0 & -1 & -1 & 4 & -1 \\ -3 & 2 & 0 & 0 & -2 & -1 & 5 & 0 \\ -3 & 1 & 0 & 1 & -2 & -1 & 4 & 0 \\ -2 & 1 & 0 & 1 & -2 & -1 & 3 & 0 \\ -2 & 1 & 1 & 0 & -1 & -1 & 2 & 0 \\ -1 & 1 & 0 & 0 & 0 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 1 & 0 & 0 & -1 & 0 & 2 & -1 \\ 0 & 1 & 0 & 0 & -2 & 0 & 3 & -1 \\ -1 & 1 & 0 & 0 & -2 & 0 & 4 & -2 \\ -1 & 2 & 0 & 0 & -4 & 1 & 5 & -2 \\ -1 & 1 & 0 & 1 & -4 & 1 & 4 & -2 \\ -1 & 1 & 0 & 1 & -3 & 0 & 3 & -1 \\ -1 & 1 & 1 & 0 & -2 & 0 & 2 & -1 \\ 0 & 1 & 0 & 0 & -1 & 0 & 1 & -1 \end{pmatrix},$$

$$\begin{pmatrix} 1 & -1 & -2 & 1 & 0 & 1 & 0 & 0 \\ 0 & -1 & -2 & 1 & 0 & 2 & -1 & 1 \\ 1 & -1 & -3 & 1 & 0 & 2 & 0 & 1 \\ 0 & -2 & -4 & 2 & 0 & 3 & 0 & 1 \\ 0 & -2 & -3 & 2 & 0 & 2 & 0 & 1 \\ 0 & -2 & -2 & 2 & -1 & 2 & 0 & 1 \\ 0 & -1 & -2 & 2 & -1 & 1 & 0 & 1 \\ 0 & -1 & -1 & 1 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 1 & -1 & -2 & 1 & 0 & 1 & 0 & 0 \\ 1 & -1 & -2 & 1 & -1 & 3 & -1 & 0 \\ 2 & -1 & -3 & 1 & -1 & 3 & 0 & 0 \\ 2 & -2 & -4 & 2 & -2 & 5 & 0 & -1 \\ 2 & -2 & -3 & 2 & -2 & 4 & 0 & -1 \\ 1 & -2 & -2 & 2 & -2 & 3 & 0 & 0 \\ 1 & -1 & -2 & 2 & -2 & 2 & 0 & 0 \\ 1 & -1 & -1 & 1 & -1 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & -1 & -1 & 1 & 1 & -1 & -1 & 0 \\ 1 & -2 & -1 & 1 & 2 & -1 & -2 & 1 \\ 2 & -2 & -2 & 2 & 2 & -2 & -2 & 1 \\ 2 & -3 & -2 & 2 & 4 & -3 & -3 & 1 \\ 2 & -2 & -2 & 1 & 4 & -3 & -2 & 1 \\ 2 & -2 & -2 & 1 & 3 & -2 & -1 & 0 \\ 1 & -1 & -2 & 1 & 2 & -1 & -1 & 0 \\ 0 & -1 & -1 & 1 & 1 & -1 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 1 & -1 & -1 & 1 & 1 & -1 & -1 & 0 \\ 2 & -2 & -1 & 1 & 1 & 0 & -2 & 0 \\ 3 & -2 & -2 & 2 & 1 & -1 & -2 & 0 \\ 4 & -3 & -2 & 2 & 2 & -1 & -3 & -1 \\ 4 & -2 & -2 & 1 & 2 & -1 & -2 & -1 \\ 3 & -2 & -2 & 1 & 2 & -1 & -1 & -1 \\ 2 & -1 & -2 & 1 & 1 & 0 & -1 & -1 \\ 1 & -1 & -1 & 1 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 1 & -1 & 0 & -1 & 2 & -1 & 1 & -1 \\ 0 & -1 & 1 & -2 & 3 & -1 & 1 & -1 \\ 1 & -2 & 0 & -2 & 4 & -1 & 1 & -1 \\ 1 & -2 & 0 & -3 & 6 & -2 & 2 & -2 \\ 1 & -2 & 0 & -2 & 5 & -2 & 1 & -1 \\ 1 & -2 & 0 & -1 & 3 & -1 & 1 & -1 \\ 0 & -2 & 0 & 0 & 2 & -1 & 1 & -1 \\ 0 & -1 & 0 & 0 & 1 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & -1 & 0 & -1 & 2 & -1 & 1 & -1 \\ 1 & -1 & 1 & -2 & 2 & 0 & 1 & -2 \\ 2 & -2 & 0 & -2 & 3 & 0 & 1 & -2 \\ 3 & -2 & 0 & -3 & 4 & 0 & 2 & -4 \\ 3 & -2 & 0 & -2 & 3 & 0 & 1 & -3 \\ 2 & -2 & 0 & -1 & 2 & 0 & 1 & -2 \\ 1 & -2 & 0 & 0 & 1 & 0 & 1 & -2 \\ 1 & -1 & 0 & 0 & 0 & 0 & 1 & -1 \end{pmatrix}, \\
\begin{pmatrix} 1 & -1 & 0 & 0 & 1 & 0 & -2 & 1 \\ 0 & -1 & 0 & 0 & 2 & 0 & -3 & 1 \\ 1 & -1 & 0 & 0 & 2 & 0 & -4 & 2 \\ 1 & -2 & 0 & 0 & 4 & -1 & -5 & 2 \\ 1 & -1 & 0 & -1 & 4 & -1 & -4 & 2 \\ 1 & -1 & 0 & -1 & 3 & 0 & -3 & 1 \\ 1 & -1 & -1 & 0 & 2 & 0 & -2 & 1 \\ 0 & -1 & 0 & 0 & 1 & 0 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 1 & -1 & 0 & 0 & 1 & 0 & -2 & 1 \\ 1 & -1 & 0 & 0 & 1 & 1 & -3 & 0 \\ 2 & -1 & 0 & 0 & 1 & 1 & -4 & 1 \\ 3 & -2 & 0 & 0 & 2 & 1 & -5 & 0 \\ 3 & -1 & 0 & -1 & 2 & 1 & -4 & 0 \\ 2 & -1 & 0 & -1 & 2 & 1 & -3 & 0 \\ 2 & -1 & -1 & 0 & 1 & 1 & -2 & 0 \\ 1 & -1 & 0 & 0 & 0 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & -1 & 1 & 0 & -1 & 1 & -1 \\ 1 & 0 & -1 & 1 & 0 & -1 & 1 & 0 \\ 1 & -1 & -1 & 2 & 0 & -2 & 2 & -1 \\ 1 & -1 & -2 & 3 & 0 & -2 & 2 & -1 \\ 1 & -1 & -2 & 2 & 1 & -2 & 2 & -1 \\ 1 & -1 & -2 & 2 & 0 & -1 & 2 & -1 \\ 0 & 0 & -1 & 1 & 0 & -1 & 2 & -1 \\ 0 & 0 & -1 & 1 & 0 & -1 & 1 & 0 \end{pmatrix}, \\
\begin{pmatrix} 1 & 0 & -1 & 1 & 0 & -1 & 1 & -1 \\ 2 & 0 & -1 & 1 & -1 & 0 & 1 & -1 \\ 2 & -1 & -1 & 2 & -1 & -1 & 2 & -2 \\ 3 & -1 & -2 & 3 & -2 & 0 & 2 & -3 \\ 3 & -1 & -2 & 2 & -1 & 0 & 2 & -3 \\ 2 & -1 & -2 & 2 & -1 & 0 & 2 & -2 \\ 1 & 0 & -1 & 1 & -1 & 0 & 2 & -2 \\ 1 & 0 & -1 & 1 & -1 & 0 & 1 & -1 \end{pmatrix}, \begin{pmatrix} -2 & -1 & 1 & 1 & -1 & 1 & 0 & -1 \\ -3 & -2 & 1 & 2 & -1 & 0 & 1 & -1 \\ -4 & -2 & 1 & 3 & -2 & 1 & 0 & -1 \\ -6 & -3 & 2 & 4 & -3 & 1 & 1 & -1 \\ -5 & -2 & 1 & 3 & -2 & 1 & 1 & -1 \\ -4 & -1 & 1 & 2 & -2 & 1 & 1 & -1 \\ -3 & -1 & 1 & 1 & -1 & 1 & 0 & 0 \\ -2 & 0 & 1 & 0 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 1 & 1 & 0 & 0 & -1 & 1 & 0 & -1 \\ 1 & 0 & 1 & 0 & -1 & 1 & 0 & -1 \\ 2 & 0 & 0 & 1 & -2 & 2 & 0 & -2 \\ 2 & 0 & 0 & 0 & -1 & 2 & 0 & -2 \\ 1 & 0 & 0 & 0 & -1 & 2 & 0 & -1 \\ 1 & 0 & 0 & 0 & -1 & 1 & 1 & -1 \\ 1 & 0 & 0 & 0 & -1 & 1 & 0 & 0 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} 1 & 2 & -1 & -1 & 1 & -1 & 0 & 0 \\ 2 & 2 & -2 & -1 & 2 & -2 & 0 & 1 \\ 2 & 3 & -2 & -2 & 3 & -3 & 1 & 0 \\ 3 & 4 & -3 & -3 & 5 & -4 & 0 & 1 \\ 2 & 3 & -2 & -2 & 4 & -4 & 0 & 1 \\ 2 & 2 & -2 & -1 & 3 & -3 & 0 & 0 \\ 1 & 2 & -1 & -1 & 2 & -2 & 0 & 0 \\ 0 & 1 & -1 & 0 & 1 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 2 & -1 & -1 & 1 & -1 & 0 & 0 \\ 3 & 2 & -2 & -1 & 1 & -1 & 0 & 0 \\ 3 & 3 & -2 & -2 & 2 & -2 & 1 & -1 \\ 5 & 4 & -3 & -3 & 3 & -2 & 0 & -1 \\ 4 & 3 & -2 & -2 & 2 & -2 & 0 & -1 \\ 3 & 2 & -2 & -1 & 2 & -2 & 0 & -1 \\ 2 & 2 & -1 & -1 & 1 & -1 & 0 & -1 \\ 1 & 1 & -1 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 1 & 2 & 0 & -2 & 1 & 0 & -1 & 1 \\ 1 & 3 & -1 & -2 & 2 & -1 & -1 & 1 \\ 1 & 4 & 0 & -4 & 3 & -1 & -1 & 1 \\ 2 & 5 & -1 & -5 & 5 & -2 & -2 & 2 \\ 1 & 4 & 0 & -4 & 4 & -2 & -2 & 2 \\ 1 & 3 & 0 & -3 & 3 & -1 & -2 & 1 \\ 1 & 2 & 0 & -2 & 2 & -1 & -1 & 1 \\ 0 & 1 & 0 & -1 & 1 & 0 & -1 & 1 \end{pmatrix}, \\
\begin{pmatrix} 1 & 2 & 0 & -2 & 1 & 0 & -1 & 1 \\ 2 & 3 & -1 & -2 & 1 & 0 & -1 & 0 \\ 2 & 4 & 0 & -4 & 2 & 0 & -1 & 0 \\ 4 & 5 & -1 & -5 & 3 & 0 & -2 & 0 \\ 3 & 4 & 0 & -4 & 2 & 0 & -2 & 0 \\ 2 & 3 & 0 & -3 & 2 & 0 & -2 & 0 \\ 2 & 2 & 0 & -2 & 1 & 0 & -1 & 0 \\ 1 & 1 & 0 & -1 & 0 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 2 & 1 & -1 & -1 & 1 & -1 & 0 & 1 \\ 2 & 2 & -1 & -2 & 2 & -1 & -1 & 2 \\ 3 & 2 & -1 & -3 & 3 & -2 & 0 & 2 \\ 4 & 3 & -2 & -4 & 5 & -3 & -1 & 3 \\ 3 & 2 & -1 & -3 & 4 & -3 & -1 & 3 \\ 3 & 1 & -1 & -2 & 3 & -2 & -1 & 2 \\ 2 & 1 & -1 & -1 & 2 & -2 & 0 & 1 \\ 1 & 0 & -1 & 0 & 1 & -1 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 2 & 1 & -1 & -1 & 1 & -1 & 0 & 1 \\ 3 & 2 & -1 & -2 & 1 & 0 & -1 & 1 \\ 4 & 2 & -1 & -3 & 2 & -1 & 0 & 1 \\ 6 & 3 & -2 & -4 & 3 & -1 & -1 & 1 \\ 5 & 2 & -1 & -3 & 2 & -1 & -1 & 1 \\ 4 & 1 & -1 & -2 & 2 & -1 & -1 & 1 \\ 3 & 1 & -1 & -1 & 1 & -1 & 0 & 0 \\ 2 & 0 & -1 & 0 & 0 & 0 & 0 & 0 \end{pmatrix}.$$

The character table of $G^{s_{16}}$:

	10										20									
$\chi_{16}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{16}^{(2)}$	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1
$\chi_{16}^{(3)}$	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	1	1	-1	-1	1	1	-1	-1
$\chi_{16}^{(4)}$	1	-1	1	-1	1	-1	-1	1	-1	1	-1	1	1	-1	-1	1	1	-1	-1	1
$\chi_{16}^{(5)}$	1	A	-A	A	-A	A	1	-1	1	-1	-/A	/A	-B	B	-/A	/A	-/B	/B	1	-1
$\chi_{16}^{(6)}$	1	B	-B	B	-B	B	1	-1	1	-1	-/B	/B	-/A	/A	-/B	/B	-A	A	1	-1
$\chi_{16}^{(7)}$	1	/B	-/B	/B	-/B	/B	1	-1	1	-1	-B	B	-A	A	-B	B	-/A	/A	1	-1
$\chi_{16}^{(8)}$	1	/A	-/A	/A	-/A	/A	1	-1	1	-1	-A	A	-/B	/B	-A	A	-B	B	1	-1
$\chi_{16}^{(9)}$	1	-A	-A	-A	-A	-A	-1	-1	-1	-1	/A	/A	-B	-B	/A	/A	-/B	-/B	-1	-1
$\chi_{16}^{(10)}$	1	-B	-B	-B	-B	-B	-1	-1	-1	-1	/B	/B	-/A	-/A	/B	/B	-A	-A	-1	-1
$\chi_{16}^{(11)}$	1	-/B	-/B	-/B	-/B	-/B	-1	-1	-1	-1	B	B	-A	-A	B	B	-/A	-/A	-1	-1
$\chi_{16}^{(12)}$	1	-/A	-/A	-/A	-/A	-/A	-1	-1	-1	-1	A	A	-/B	-/B	A	A	-B	-B	-1	-1
$\chi_{16}^{(13)}$	1	A	-A	A	-A	A	-1	1	-1	1	/A	-/A	-B	B	/A	-/A	-/B	/B	-1	1
$\chi_{16}^{(14)}$	1	B	-B	B	-B	B	-1	1	-1	1	/B	-/B	-/A	/A	/B	-/B	-A	A	-1	1
$\chi_{16}^{(15)}$	1	/B	-/B	/B	-/B	/B	-1	1	-1	1	B	-B	-A	A	B	-B	-/A	/A	-1	1
$\chi_{16}^{(16)}$	1	/A	-/A	/A	-/A	/A	-1	1	-1	1	A	-A	-/B	/B	A	-A	-B	B	-1	1
$\chi_{16}^{(17)}$	1	-A	-A	-A	-A	-A	1	1	1	1	-/A	-/A	-B	-B	-/A	-/A	-/B	-/B	1	1
$\chi_{16}^{(18)}$	1	-B	-B	-B	-B	-B	1	1	1	1	-/B	-/B	-/A	-/A	-/B	-/B	-A	-A	1	1
$\chi_{16}^{(19)}$	1	-/B	-/B	-/B	-/B	-/B	1	1	1	1	-B	-B	-A	-A	-B	-B	-/A	-/A	1	1
$\chi_{16}^{(20)}$	1	-/A	-/A	-/A	-/A	-/A	1	1	1	1	-A	-A	-/B	-/B	-A	-A	-B	-B	1	1
$\chi_{16}^{(21)}$	1	C	-/C	/C	1	-1	1	-1	-/C	/C	1	-1	-C	C	-/C	/C	-C	C	-C	C
$\chi_{16}^{(22)}$	1	/C	-C	C	1	-1	1	-1	-C	C	1	-1	-/C	/C	-C	C	-/C	/C	-/C	/C
$\chi_{16}^{(23)}$	1	-C	-/C	-/C	1	1	-1	-1	/C	/C	-1	-1	-C	-C	/C	/C	-C	-C	C	C
$\chi_{16}^{(24)}$	1	-/C	-C	-C	1	1	-1	-1	C	C	-1	-1	-/C	-/C	C	C	-/C	-/C	/C	/C
$\chi_{16}^{(25)}$	1	C	-/C	/C	1	-1	-1	1	/C	-/C	-1	1	-C	C	/C	-/C	-C	C	C	-C
$\chi_{16}^{(26)}$	1	/C	-C	C	1	-1	-1	1	C	-C	-1	1	-/C	/C	C	-C	-/C	/C	/C	-/C
$\chi_{16}^{(27)}$	1	-C	-/C	-/C	1	1	1	1	-/C	-/C	1	1	-C	-C	-/C	-/C	-C	-C	-C	-C
$\chi_{16}^{(28)}$	1	-/C	-C	-C	1	1	1	1	-C	-C	1	1	-/C	-/C	-C	-C	-/C	-/C	-/C	-/C
$\chi_{16}^{(29)}$	1	D	-/G	/G	-A	A	1	-1	-/C	/C	-/A	/A	-E	E	-/D	/D	-F	F	-C	C
$\chi_{16}^{(30)}$	1	E	-/F	/F	-B	B	1	-1	-/C	/C	-/B	/B	-G	G	-/E	/E	-D	D	-C	C
$\chi_{16}^{(31)}$	1	F	-/E	/E	-/B	/B	1	-1	-/C	/C	-B	B	-D	D	-/F	/F	-G	G	-C	C
$\chi_{16}^{(32)}$	1	G	-/D	/D	-/A	/A	1	-1	-/C	/C	-A	A	-F	F	-/G	/G	-E	E	-C	C
$\chi_{16}^{(33)}$	1	/G	-D	D	-A	A	1	-1	-C	C	-/A	/A	-/F	/F	-G	G	-/E	/E	-/C	/C
$\chi_{16}^{(34)}$	1	/F	-E	E	-B	B	1	-1	-C	C	-/B	/B	-/D	/D	-F	F	-/G	/G	-/C	/C
$\chi_{16}^{(35)}$	1	/E	-F	F	-/B	/B	1	-1	-C	C	-B	B	-/G	/G	-E	E	-/D	/D	-/C	/C
$\chi_{16}^{(36)}$	1	/D	-G	G	-/A	/A	1	-1	-C	C	-A	A	-/E	/E	-D	D	-/F	/F	-/C	/C
$\chi_{16}^{(37)}$	1	-D	-/G	-/G	-A	-A	-1	-1	/C	/C	/A	/A	-E	-E	/D	/D	-F	-F	C	C
$\chi_{16}^{(38)}$	1	-E	-/F	-/F	-B	-B	-1	-1	/C	/C	/B	/B	-G	-G	/E	/E	-D	-D	C	C
$\chi_{16}^{(39)}$	1	-F	-/E	-/E	-/B	-/B	-1	-1	/C	/C	B	B	-D	-D	/F	/F	-G	-G	C	C
$\chi_{16}^{(40)}$	1	-G	-/D	-/D	-/A	-/A	-1	-1	/C	/C	A	A	-F	-F	/G	/G	-E	-E	C	C
$\chi_{16}^{(41)}$	1	-/G	-D	-D	-A	-A	-1	-1	C	C	/A	/A	-/F	-/F	G	G	-/E	-/E	/C	/C
$\chi_{16}^{(42)}$	1	-/F	-E	-E	-B	-B	-1	-1	C	C	/B	/B	-/D	-/D	F	F	-/G	-/G	/C	/C
$\chi_{16}^{(43)}$	1	-/E	-F	-F	-/B	-/B	-1	-1	C	C	B	B	-/G	-/G	E	E	-/D	-/D	/C	/C
$\chi_{16}^{(44)}$	1	-/D	-G	-G	-/A	-/A	-1	-1	C	C	A	A	-/E	-/E	D	D	-/F	-/F	/C	/C
$\chi_{16}^{(45)}$	1	D	-/G	/G	-A	A	-1	1	/C	-/C	/A	-/A	-E	E	/D	-/D	-F	F	C	-C

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$\chi_{16}^{(46)}$	1	E	-/F	/F	-B	B	-1	1	/C	-/C	/B	-/B	-G	G	/E	-/E	-D	D	C	-C	A	-A	/G	
$\chi_{16}^{(47)}$	1	F	-/E	/E	-/B	/B	-1	1	/C	-/C	B	-B	-D	D	/F	-/F	-G	G	C	-C	/A	-/A	/D	
$\chi_{16}^{(48)}$	1	G	-/D	/D	-/A	/A	-1	1	/C	-/C	A	-A	-F	F	/G	-/G	-E	E	C	-C	B	-B	/F	
$\chi_{16}^{(49)}$	1	/G	-D	D	-A	A	-1	1	C	-C	/A	-/A	-/F	/F	G	-G	-/E	/E	/C	-/C	/B	-/B	F	
$\chi_{16}^{(50)}$	1	/F	-E	E	-B	B	-1	1	C	-C	/B	-/B	-/D	/D	F	-F	-/G	/G	/C	-/C	A	-A	D	
$\chi_{16}^{(51)}$	1	/E	-F	F	-/B	/B	-1	1	C	-C	B	-B	-/G	/G	E	-E	-/D	/D	/C	-/C	/A	-/A	G	
$\chi_{16}^{(52)}$	1	/D	-G	G	-/A	/A	-1	1	C	-C	A	-A	-/E	/E	D	-D	-/F	/F	/C	-/C	B	-B	E	
$\chi_{16}^{(53)}$	1	-D	-/G	-/G	-A	-A	1	1	-/C	-/C	-/A	-/A	-E	-E	-/D	-/D	-F	-F	-C	-C	-/B	-/B	-/E	
$\chi_{16}^{(54)}$	1	-E	-/F	-/F	-B	-B	1	1	-/C	-/C	-/B	-/B	-G	-G	-/E	-/E	-D	-D	-C	-C	-A	-A	-/G	
$\chi_{16}^{(55)}$	1	-F	-/E	-/E	-/B	-/B	1	1	-/C	-/C	-B	-B	-D	-D	-/F	-/F	-G	-G	-C	-C	-/A	-/A	-/D	
$\chi_{16}^{(56)}$	1	-G	-/D	-/D	-/A	-/A	1	1	-/C	-/C	-A	-A	-F	-F	-/G	-/G	-E	-E	-C	-C	-B	-B	-/F	
$\chi_{16}^{(57)}$	1	-/G	-D	-D	-A	-A	1	1	-C	-C	-/A	-/A	-/F	-/F	-G	-G	-/E	-/E	-/C	-/C	-/B	-/B	-F	
$\chi_{16}^{(58)}$	1	-/F	-E	-E	-B	-B	1	1	-C	-C	-/B	-/B	-/D	-/D	-F	-F	-/G	-/G	-/C	-/C	-A	-A	-D	
$\chi_{16}^{(59)}$	1	-/E	-F	-F	-/B	-/B	1	1	-C	-C	-B	-B	-/G	-/G	-E	-E	-/D	-/D	-/C	-/C	-/A	-/A	-G	
$\chi_{16}^{(60)}$	1	-/D	-G	-G	-/A	-/A	1	1	-C	-C	-A	-A	-/E	-/E	-D	-D	-/F	-/F	-/C	-/C	-B	-B	-E	
	30																40							
$\chi_{16}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
$\chi_{16}^{(2)}$	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1		
$\chi_{16}^{(3)}$	-1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	1	1	1	1	1	1	-1	-1	1		
$\chi_{16}^{(4)}$	1	1	-1	-1	1	-1	1	1	-1	1	-1	-1	1	1	-1	1	-1	1	-1	-1	1	1		
$\chi_{16}^{(5)}$	/B	-B	B	-B	B	-/A	/A	-/A	/A	-B	B	-B	B	-/B	/B	-/B	/B	1	-1	-/B	/B	-/A		
$\chi_{16}^{(6)}$	A	-/A	/A	-/A	/A	-/B	/B	-/B	/B	-/A	/A	-/A	/A	-A	A	-A	A	1	-1	-A	A	-/B		
$\chi_{16}^{(7)}$	/A	-A	A	-A	A	-B	B	-B	B	-A	A	-A	A	-/A	/A	-/A	/A	1	-1	-/A	/A	-B		
$\chi_{16}^{(8)}$	B	-/B	/B	-/B	/B	-A	A	-A	A	-/B	/B	-/B	/B	-B	B	-B	B	1	-1	-B	B	-A		
$\chi_{16}^{(9)}$	/B	-B	-B	B	B	/A	/A	-/A	-/A	-B	-B	B	B	-/B	-/B	-/B	-/B	1	1	/B	/B	-/A		
$\chi_{16}^{(10)}$	A	-/A	-/A	/A	/A	/B	/B	-/B	-/B	-/A	-/A	/A	/A	-A	-A	-A	-A	1	1	A	A	-/B		
$\chi_{16}^{(11)}$	/A	-A	-A	A	A	B	B	-B	-B	-A	-A	A	A	-/A	-/A	-/A	-/A	1	1	/A	/A	-B		
$\chi_{16}^{(12)}$	B	-/B	-/B	/B	/B	A	A	-A	-A	-/B	-/B	/B	/B	-B	-B	-B	-B	1	1	B	B	-A		
$\chi_{16}^{(13)}$	-/B	-B	B	B	-B	/A	-/A	-/A	/A	-B	B	B	-B	-/B	/B	-/B	/B	1	-1	/B	-/B	-/A		
$\chi_{16}^{(14)}$	-A	-/A	/A	/A	-/A	/B	-/B	-/B	/B	-/A	/A	/A	-/A	-A	A	-A	A	1	-1	A	-A	-/B		
$\chi_{16}^{(15)}$	-/A	-A	A	A	-A	B	-B	-B	B	-A	A	A	-A	-/A	/A	-/A	/A	1	-1	/A	-/A	-B		
$\chi_{16}^{(16)}$	-B	-/B	/B	/B	-/B	A	-A	-A	A	-/B	/B	/B	-/B	-B	B	-B	B	1	-1	B	-B	-A		
$\chi_{16}^{(17)}$	-/B	-B	-B	-B	-B	-/A	-/A	-/A	-/A	-B	-B	-B	-B	-/B	-/B	-/B	-/B	1	1	-/B	-/B	-/A		
$\chi_{16}^{(18)}$	-A	-/A	-/A	-/A	-/A	-/B	-/B	-/B	-/B	-/A	-/A	-/A	-/A	-A	-A	-A	-A	1	1	-A	-A	-/B		
$\chi_{16}^{(19)}$	-/A	-A	-A	-A	-A	-B	-B	-B	-B	-A	-A	-A	-A	-/A	-/A	-/A	-/A	1	1	-/A	-/A	-B		
$\chi_{16}^{(20)}$	-B	-/B	-/B	-/B	-/B	-A	-A	-A	-A	-/B	-/B	-/B	-/B	-B	-B	-B	-B	1	1	-B	-B	-A		
$\chi_{16}^{(21)}$	/C	-/C	/C	1	-1	-C	C	-C	C	1	-1	-/C	/C	-/C	/C	1	-1	-C	C	-C	C	-/C		
$\chi_{16}^{(22)}$	C	-C	C	1	-1	-/C	/C	-/C	/C	1	-1	-C	C	-C	C	1	-1	-/C	/C	-/C	/C	-C		
$\chi_{16}^{(23)}$	/C	-/C	-/C	-1	-1	C	C	-C	-C	1	1	/C	/C	-/C	-/C	1	1	-C	-C	C	C	-/C		
$\chi_{16}^{(24)}$	C	-C	-C	-1	-1	/C	/C	-/C	-/C	1	1	C	C	-C	-C	1	1	-/C	-/C	/C	/C	-C		
$\chi_{16}^{(25)}$	-/C	-/C	/C	-1	1	C	-C	-C	C	1	-1	/C	-/C	-/C	/C	1	-1	-C	C	C	-C	-/C		
$\chi_{16}^{(26)}$	-C	-C	C	-1	1	/C	-/C	-/C	/C	1	-1	C	-C	-C	C	1	-1	-/C	/C	/C	-/C	-C		
$\chi_{16}^{(27)}$	-/C	-/C	-/C	1	1	-C	-C	-C	-C	1	1	-/C	-/C	-/C	-/C	1	1	-C	-C	-C	-C	-/C		
$\chi_{16}^{(28)}$	-C	-C	-C	1	1	-/C	-/C	-/C	-/C	1	1	-C	-C	-C	-C	1	1	-/C	-/C	-/C	-/C	-C		
$\chi_{16}^{(29)}$	/E	-/F	/F	-B	B	-G	G	-G	G	-B	B	-/F	/F	-/E	/E	-/B	/B	-C	C	-F	F	-/D		
$\chi_{16}^{(30)}$	/G	-/D	/D	-/A	/A	-F	F	-F	F	-/A	/A	-/D	/D	-/G	/G	-A	A	-C	C	-D	D	-/E		

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$\chi_{16}^{(31)}$	/D	-/G	/G	-A	A	-E	E	-E	E	-A	A	-/G	/G	-/D	/D	-/A	/A	-C	C	-G	G	-/F
$\chi_{16}^{(32)}$	/F	-/E	/E	-/B	/B	-D	D	-D	D	-/B	/B	-/E	/E	-/F	/F	-B	B	-C	C	-E	E	-/G
$\chi_{16}^{(33)}$	F	-E	E	-B	B	-/D	/D	-/D	/D	-B	B	-E	E	-F	F	-/B	/B	-/C	/C	-/E	/E	-G
$\chi_{16}^{(34)}$	D	-G	G	-/A	/A	-/E	/E	-/E	/E	-/A	/A	-G	G	-D	D	-A	A	-/C	/C	-/G	/G	-F
$\chi_{16}^{(35)}$	G	-D	D	-A	A	-/F	/F	-/F	/F	-A	A	-D	D	-G	G	-/A	/A	-/C	/C	-/D	/D	-E
$\chi_{16}^{(36)}$	E	-F	F	-/B	/B	-/G	/G	-/G	/G	-/B	/B	-F	F	-E	E	-B	B	-/C	/C	-/F	/F	-D
$\chi_{16}^{(37)}$	/E	-/F	-/F	B	B	G	G	-G	-G	-B	-B	/F	/F	-/E	-/E	-/B	-/B	-C	-C	F	F	-/D
$\chi_{16}^{(38)}$	/G	-/D	-/D	/A	/A	F	F	-F	-F	-/A	-/A	/D	/D	-/G	-/G	-A	-A	-C	-C	D	D	-/E
$\chi_{16}^{(39)}$	/D	-/G	-/G	A	A	E	E	-E	-E	-A	-A	/G	/G	-/D	-/D	-/A	-/A	-C	-C	G	G	-/F
$\chi_{16}^{(40)}$	/F	-/E	-/E	/B	/B	D	D	-D	-D	-/B	-/B	/E	/E	-/F	-/F	-B	-B	-C	-C	E	E	-/G
$\chi_{16}^{(41)}$	F	-E	-E	B	B	/D	/D	-/D	-/D	-B	-B	E	E	-F	-F	-/B	-/B	-/C	-/C	/E	/E	-G
$\chi_{16}^{(42)}$	D	-G	-G	/A	/A	/E	/E	-/E	-/E	-/A	-/A	G	G	-D	-D	-A	-A	-/C	-/C	/G	/G	-F
$\chi_{16}^{(43)}$	G	-D	-D	A	A	/F	/F	-/F	-/F	-A	-A	D	D	-G	-G	-/A	-/A	-/C	-/C	/D	/D	-E
$\chi_{16}^{(44)}$	E	-F	-F	/B	/B	/G	/G	-/G	-/G	-/B	-/B	F	F	-E	-E	-B	-B	-/C	-/C	/F	/F	-D
$\chi_{16}^{(45)}$	-/E	-/F	/F	B	-B	G	-G	-G	G	-B	B	/F	-/F	-/E	/E	-/B	/B	-C	C	F	-F	-/D
$\chi^{(46)}$	-/G	-/D	/D	/A	-/A	F	-F	-F	F	-/A	/A	/D	-/D	-/G	/G	-A	A	-C	C	D	-D	-/E
$\chi_{16}^{(47)}$	-/D	-/G	/G	A	-A	E	-E	-E	E	-A	A	/G	-/G	-/D	/D	-/A	/A	-C	C	G	-G	-/F
$\chi_{16}^{(48)}$	-/F	-/E	/E	/B	-/B	D	-D	-D	D	-/B	/B	/E	-/E	-/F	/F	-B	B	-C	C	E	-E	-/G
$\chi_{16}^{(49)}$	-F	-E	E	B	-B	/D	-/D	-/D	/D	-B	B	E	-E	-F	F	-/B	/B	-/C	/C	/E	-/E	-G
$\chi_{16}^{(50)}$	-D	-G	G	/A	-/A	/E	-/E	-/E	/E	-/A	/A	G	-G	-D	D	-A	A	-/C	/C	/G	-/G	-F
$\chi_{16}^{(51)}$	-G	-D	D	A	-A	/F	-/F	-/F	/F	-A	A	D	-D	-G	G	-/A	/A	-/C	/C	/D	-/D	-E
$\chi_{16}^{(52)}$	-E	-F	F	/B	-/B	/G	-/G	-/G	/G	-/B	/B	F	-F	-E	E	-B	B	-/C	/C	/F	-/F	-D
$\chi_{16}^{(53)}$	-/E	-/F	-/F	-B	-B	-G	-G	-G	-G	-B	-B	-/F	-/F	-/E	-/E	-/B	-/B	-C	-C	-F	-F	-/D
$\chi_{16}^{(54)}$	-/G	-/D	-/D	-/A	-/A	-F	-F	-F	-F	-/A	-/A	-/D	-/D	-/G	-/G	-A	-A	-C	-C	-D	-D	-/E
$\chi_{16}^{(55)}$	-/D	-/G	-/G	-A	-A	-E	-E	-E	-E	-A	-A	-/G	-/G	-/D	-/D	-/A	-/A	-C	-C	-G	-G	-/F
$\chi_{16}^{(56)}$	-/F	-/E	-/E	-/B	-/B	-D	-D	-D	-D	-/B	-/B	-/E	-/E	-/F	-/F	-B	-B	-C	-C	-E	-E	-/G
$\chi_{16}^{(57)}$	-F	-E	-E	-B	-B	-/D	-/D	-/D	-/D	-B	-B	-E	-E	-F	-F	-/B	-/B	-/C	-/C	-/E	-/E	-G
$\chi_{16}^{(58)}$	-D	-G	-G	-/A	-/A	-/E	-/E	-/E	-/E	-/A	-/A	-G	-G	-D	-D	-A	-A	-/C	-/C	-/G	-/G	-F
$\chi_{16}^{(59)}$	-G	-D	-D	-A	-A	-/F	-/F	-/F	-/F	-A	-A	-D	-D	-G	-G	-/A	-/A	-/C	-/C	-/D	-/D	-E
$\chi_{16}^{(60)}$	-E	-F	-F	-/B	-/B	-/G	-/G	-/G	-/G	-/B	-/B	-F	-F	-E	-E	-B	-B	-/C	-/C	-/F	-/F	-D
	50										60											
$\chi_{16}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
$\chi_{16}^{(2)}$	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1							
$\chi_{16}^{(3)}$	1	-1	-1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1							
$\chi_{16}^{(4)}$	-1	-1	1	1	-1	1	-1	1	-1	-1	1	-1	1	-1	1							
$\chi_{16}^{(5)}$	/A	-B	B	-/A	/A	1	-1	-A	-1	-A	A	-A	A	-A	A							
$\chi_{16}^{(6)}$	/B	-/A	/A	-/B	/B	1	-1	-B	-1	-B	B	-B	B	-B	B							
$\chi_{16}^{(7)}$	B	-A	A	-B	B	1	-1	-/B	-1	-/B	/B	-/B	/B	-/B	/B							
$\chi_{16}^{(8)}$	A	-/B	/B	-A	A	1	-1	-/A	-1	-/A	/A	-/A	/A	-/A	/A							
$\chi_{16}^{(9)}$	-/A	B	B	-/A	-/A	1	1	-A	1	A	A	A	A	A	A							
$\chi_{16}^{(10)}$	-/B	/A	/A	-/B	-/B	1	1	-B	1	B	B	B	B	B	B							
$\chi_{16}^{(11)}$	-B	A	A	-B	-B	1	1	-/B	1	/B	/B	/B	/B	/B	/B							
$\chi_{16}^{(12)}$	-A	/B	/B	-A	-A	1	1	-/A	1	/A	/A	/A	/A	/A	/A							
$\chi_{16}^{(13)}$	/A	B	-B	-/A	/A	1	-1	-A	-1	A	-A	A	-A	A	-A							
$\chi_{16}^{(14)}$	/B	/A	-/A	-/B	/B	1	-1	-B	-1	B	-B	B	-B	B	-B							
$\chi_{16}^{(15)}$	B	A	-A	-B	B	1	-1	-/B	-1	/B	-/B	/B	-/B	/B	-/B							

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$\chi_{16}^{(16)}$	A	/B	-/B	-A	A	1	-1	-/A	-1	/A	-/A	/A	-/A	/A	-/A
$\chi_{16}^{(17)}$	-/A	-B	-B	-/A	-/A	1	1	-A	1	-A	-A	-A	-A	-A	-A
$\chi_{16}^{(18)}$	-/B	-/A	-/A	-/B	-/B	1	1	-B	1	-B	-B	-B	-B	-B	-B
$\chi_{16}^{(19)}$	-B	-A	-A	-B	-B	1	1	-/B	1	-/B	-/B	-/B	-/B	-/B	-/B
$\chi_{16}^{(20)}$	-A	-/B	-/B	-A	-A	1	1	-/A	1	-/A	-/A	-/A	-/A	-/A	-/A
$\chi_{16}^{(21)}$	/C	-C	C	1	-1	-/C	/C	-C	-1	1	-1	-/C	/C	-C	C
$\chi_{16}^{(22)}$	C	-/C	/C	1	-1	-C	C	-/C	-1	1	-1	-C	C	-/C	/C
$\chi_{16}^{(23)}$	-/C	C	C	1	1	-/C	-/C	-C	1	-1	-1	/C	/C	C	C
$\chi_{16}^{(24)}$	-C	/C	/C	1	1	-C	-C	-/C	1	-1	-1	C	C	/C	/C
$\chi_{16}^{(25)}$	/C	C	-C	1	-1	-/C	/C	-C	-1	-1	1	/C	-/C	C	-C
$\chi_{16}^{(26)}$	C	/C	-/C	1	-1	-C	C	-/C	-1	-1	1	C	-C	/C	-/C
$\chi_{16}^{(27)}$	-/C	-C	-C	1	1	-/C	-/C	-C	1	1	1	-/C	-/C	-C	-C
$\chi_{16}^{(28)}$	-C	-/C	-/C	1	1	-C	-C	-/C	1	1	1	-C	-C	-/C	-/C
$\chi_{16}^{(29)}$	/D	-E	E	-/A	/A	-/C	/C	-D	-1	-A	A	-/G	/G	-D	D
$\chi_{16}^{(30)}$	/E	-G	G	-/B	/B	-/C	/C	-E	-1	-B	B	-/F	/F	-E	E
$\chi_{16}^{(31)}$	/F	-D	D	-B	B	-/C	/C	-F	-1	-/B	/B	-/E	/E	-F	F
$\chi_{16}^{(32)}$	/G	-F	F	-A	A	-/C	/C	-G	-1	-/A	/A	-/D	/D	-G	G
$\chi_{16}^{(33)}$	G	-/F	/F	-/A	/A	-C	C	-/G	-1	-A	A	-D	D	-/G	/G
$\chi_{16}^{(34)}$	F	-/D	/D	-/B	/B	-C	C	-/F	-1	-B	B	-E	E	-/F	/F
$\chi_{16}^{(35)}$	E	-/G	/G	-B	B	-C	C	-/E	-1	-/B	/B	-F	F	-/E	/E
$\chi_{16}^{(36)}$	D	-/E	/E	-A	A	-C	C	-/D	-1	-/A	/A	-G	G	-/D	/D
$\chi_{16}^{(37)}$	-/D	E	E	-/A	-/A	-/C	-/C	-D	1	A	A	/G	/G	D	D
$\chi_{16}^{(38)}$	-/E	G	G	-/B	-/B	-/C	-/C	-E	1	B	B	/F	/F	E	E
$\chi_{16}^{(39)}$	-/F	D	D	-B	-B	-/C	-/C	-F	1	/B	/B	/E	/E	F	F
$\chi_{16}^{(40)}$	-/G	F	F	-A	-A	-/C	-/C	-G	1	/A	/A	/D	/D	G	G
$\chi_{16}^{(41)}$	-G	/F	/F	-/A	-/A	-C	-C	-/G	1	A	A	D	D	/G	/G
$\chi_{16}^{(42)}$	-F	/D	/D	-/B	-/B	-C	-C	-/F	1	B	B	E	E	/F	/F
$\chi_{16}^{(43)}$	-E	/G	/G	-B	-B	-C	-C	-/E	1	/B	/B	F	F	/E	/E
$\chi_{16}^{(44)}$	-D	/E	/E	-A	-A	-C	-C	-/D	1	/A	/A	G	G	/D	/D
$\chi_{16}^{(45)}$	/D	E	-E	-/A	/A	-/C	/C	-D	-1	A	-A	/G	-/G	D	-D
$\chi_{16}^{(46)}$	/E	G	-G	-/B	/B	-/C	/C	-E	-1	B	-B	/F	-/F	E	-E
$\chi_{16}^{(47)}$	/F	D	-D	-B	B	-/C	/C	-F	-1	/B	-/B	/E	-/E	F	-F
$\chi_{16}^{(48)}$	/G	F	-F	-A	A	-/C	/C	-G	-1	/A	-/A	/D	-/D	G	-G
$\chi_{16}^{(49)}$	G	/F	-/F	-/A	/A	-C	C	-/G	-1	A	-A	D	-D	/G	-/G
$\chi_{16}^{(50)}$	F	/D	-/D	-/B	/B	-C	C	-/F	-1	B	-B	E	-E	/F	-/F
$\chi_{16}^{(51)}$	E	/G	-/G	-B	B	-C	C	-/E	-1	/B	-/B	F	-F	/E	-/E
$\chi_{16}^{(52)}$	D	/E	-/E	-A	A	-C	C	-/D	-1	/A	-/A	G	-G	/D	-/D
$\chi_{16}^{(53)}$	-/D	-E	-E	-/A	-/A	-/C	-/C	-D	1	-A	-A	-/G	-/G	-D	-D
$\chi_{16}^{(54)}$	-/E	-G	-G	-/B	-/B	-/C	-/C	-E	1	-B	-B	-/F	-/F	-E	-E
$\chi_{16}^{(55)}$	-/F	-D	-D	-B	-B	-/C	-/C	-F	1	-/B	-/B	-/E	-/E	-F	-F
$\chi_{16}^{(56)}$	-/G	-F	-F	-A	-A	-/C	-/C	-G	1	-/A	-/A	-/D	-/D	-G	-G
$\chi_{16}^{(57)}$	-G	-/F	-/F	-/A	-/A	-C	-C	-/G	1	-A	-A	-D	-D	-/G	-/G
$\chi_{16}^{(58)}$	-F	-/D	-/D	-/B	-/B	-C	-C	-/F	1	-B	-B	-E	-E	-/F	-/F
$\chi_{16}^{(59)}$	-E	-/G	-/G	-B	-B	-C	-C	-/E	1	-/B	-/B	-F	-F	-/E	-/E
$\chi_{16}^{(60)}$	-D	-/E	-/E	-A	-A	-C	-C	-/D	1	-/A	-/A	-G	-G	-/D	-/D

where $A = -E(5)^3, B = -E(5), C = -E(3) = (1-ER(-3))/2 = -b3, D = -E(15)^{14}, E = -E(15)^8, F = -E(15)^2, G = -E(15)^{11}$.

The generators of $G^{s_{17}}$ are:

$$\begin{pmatrix} 0 & 0 & 0 & -1 & 2 & -1 & 1 & -2 \\ 1 & -1 & 0 & -1 & 2 & -1 & 2 & -3 \\ 1 & -1 & -1 & -1 & 3 & -1 & 2 & -4 \\ 2 & -1 & -1 & -2 & 4 & -1 & 3 & -6 \\ 2 & -1 & -1 & -1 & 3 & -1 & 2 & -5 \\ 1 & -1 & -1 & 0 & 2 & -1 & 2 & -4 \\ 0 & -1 & 0 & 0 & 1 & 0 & 1 & -3 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & -2 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 1 & 0 & -1 & 1 & 0 & -1 & 1 & 0 \\ 1 & -1 & 0 & 1 & 0 & -1 & 1 & 0 \\ 1 & -1 & -1 & 2 & 0 & -1 & 1 & 0 \\ 1 & -1 & -1 & 1 & 1 & -1 & 1 & 0 \\ 1 & -1 & -1 & 1 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 & 0 & 0 & 0 & -1 \\ 0 & 0 & 0 & 1 & -1 & 1 & 0 & -1 \\ 0 & 0 & 0 & 1 & -1 & 0 & 1 & -1 \\ 0 & 0 & 0 & 1 & -1 & 0 & 0 & 0 \end{pmatrix},$$

$$\begin{pmatrix} 1 & 0 & -1 & 1 & 0 & -1 & 1 & -1 \\ 0 & 1 & -1 & 1 & 0 & -1 & 1 & -1 \\ 0 & 0 & -1 & 2 & 0 & -2 & 2 & -2 \\ 0 & 0 & -2 & 3 & 0 & -2 & 2 & -2 \\ 0 & 0 & -2 & 2 & 1 & -2 & 2 & -2 \\ 0 & 0 & -2 & 2 & 0 & -1 & 2 & -2 \\ 0 & 0 & -1 & 1 & 0 & -1 & 2 & -1 \\ 0 & 0 & -1 & 1 & 0 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 1 & 0 & -1 & 0 & 1 & 0 & -1 \\ 0 & 2 & 0 & -1 & 0 & 1 & 0 & -1 \\ 0 & 2 & 1 & -2 & 0 & 2 & 0 & -2 \\ 0 & 3 & 0 & -2 & 0 & 3 & 0 & -3 \\ 0 & 2 & 0 & -2 & 1 & 2 & 0 & -2 \\ 0 & 1 & 0 & -1 & 0 & 2 & 0 & -1 \\ 0 & 1 & 0 & -1 & 0 & 1 & 1 & -1 \\ 0 & 1 & 0 & -1 & 0 & 1 & 0 & 0 \end{pmatrix}.$$

The representatives of conjugacy classes of $G^{s_{17}}$ are:

$$\begin{pmatrix} 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} -1 & -2 & 1 & 1 & -1 & 1 & 0 & 0 \\ -3 & -2 & 2 & 1 & -1 & 1 & 0 & 0 \\ -3 & -3 & 2 & 2 & -2 & 2 & -1 & 1 \\ -5 & -4 & 3 & 3 & -3 & 2 & 0 & 1 \\ -4 & -3 & 2 & 2 & -2 & 2 & 0 & 1 \\ -3 & -2 & 2 & 1 & -2 & 2 & 0 & 1 \\ -2 & -2 & 1 & 1 & -1 & 1 & 0 & 1 \\ -1 & -1 & 1 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 0 & 1 & -2 & 1 & -1 & 2 \\ -1 & 1 & 0 & 1 & -2 & 1 & -2 & 3 \\ -1 & 1 & 1 & 1 & -3 & 1 & -2 & 4 \\ -2 & 1 & 1 & 2 & -4 & 1 & -3 & 6 \\ -2 & 1 & 1 & 1 & -3 & 1 & -2 & 5 \\ -1 & 1 & 1 & 0 & -2 & 1 & -2 & 4 \\ 0 & 1 & 0 & 0 & -1 & 0 & -1 & 3 \\ 0 & 0 & 0 & 0 & 0 & 0 & -1 & 2 \end{pmatrix},$$

$$\begin{pmatrix} 1 & -1 & 0 & 0 & 1 & 0 & -2 & 1 \\ 0 & -1 & 0 & 0 & 2 & 0 & -3 & 1 \\ 1 & -1 & 0 & 0 & 2 & 0 & -4 & 2 \\ 1 & -2 & 0 & 0 & 4 & -1 & -5 & 2 \\ 1 & -1 & 0 & -1 & 4 & -1 & -4 & 2 \\ 1 & -1 & 0 & -1 & 3 & 0 & -3 & 1 \\ 1 & -1 & -1 & 0 & 2 & 0 & -2 & 1 \\ 0 & -1 & 0 & 0 & 1 & 0 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 2 & -1 & 0 & -1 & 0 & 1 \\ -1 & 1 & 3 & -2 & 1 & -2 & 0 & 1 \\ -1 & 0 & 4 & -2 & 1 & -2 & -1 & 2 \\ -1 & 1 & 5 & -3 & 2 & -4 & -1 & 3 \\ -1 & 1 & 4 & -3 & 2 & -3 & -1 & 3 \\ 0 & 1 & 3 & -3 & 2 & -2 & -1 & 2 \\ 0 & 0 & 2 & -2 & 2 & -2 & 0 & 1 \\ 0 & 0 & 1 & -1 & 1 & -1 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & -2 & 1 & 0 & 1 & 0 & -1 \\ 1 & -1 & -3 & 2 & -1 & 2 & 0 & -1 \\ 1 & 0 & -4 & 2 & -1 & 2 & 1 & -2 \\ 1 & -1 & -5 & 3 & -2 & 4 & 1 & -3 \\ 1 & -1 & -4 & 3 & -2 & 3 & 1 & -3 \\ 0 & -1 & -3 & 3 & -2 & 2 & 1 & -2 \\ 0 & 0 & -2 & 2 & -2 & 2 & 0 & -1 \\ 0 & 0 & -1 & 1 & -1 & 1 & 0 & -1 \end{pmatrix},$$

$$\begin{pmatrix} -1 & 1 & 0 & 0 & -1 & 0 & 2 & -1 \\ 0 & 1 & 0 & 0 & -2 & 0 & 3 & -1 \\ -1 & 1 & 0 & 0 & -2 & 0 & 4 & -2 \\ -1 & 2 & 0 & 0 & -4 & 1 & 5 & -2 \\ -1 & 1 & 0 & 1 & -4 & 1 & 4 & -2 \\ -1 & 1 & 0 & 1 & -3 & 0 & 3 & -1 \\ -1 & 1 & 1 & 0 & -2 & 0 & 2 & -1 \\ 0 & 1 & 0 & 0 & -1 & 0 & 1 & -1 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & -1 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & -1 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & -1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & -1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & -1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & -1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 0 & -1 & 2 & -1 & 1 & -2 \\ 1 & -1 & 0 & -1 & 2 & -1 & 2 & -3 \\ 1 & -1 & -1 & -1 & 3 & -1 & 2 & -4 \\ 2 & -1 & -1 & -2 & 4 & -1 & 3 & -6 \\ 2 & -1 & -1 & -1 & 3 & -1 & 2 & -5 \\ 1 & -1 & -1 & 0 & 2 & -1 & 2 & -4 \\ 0 & -1 & 0 & 0 & 1 & 0 & 1 & -3 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & -2 \end{pmatrix},$$

$$\begin{pmatrix} 1 & 2 & -1 & -1 & 1 & -1 & 0 & 0 \\ 3 & 2 & -2 & -1 & 1 & -1 & 0 & 0 \\ 3 & 3 & -2 & -2 & 2 & -2 & 1 & -1 \\ 5 & 4 & -3 & -3 & 3 & -2 & 0 & -1 \\ 4 & 3 & -2 & -2 & 2 & -2 & 0 & -1 \\ 3 & 2 & -2 & -1 & 2 & -2 & 0 & -1 \\ 2 & 2 & -1 & -1 & 1 & -1 & 0 & -1 \\ 1 & 1 & -1 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 1 & 1 & 0 & -1 & 0 & 1 & 0 & -1 \\ 0 & 2 & 0 & -1 & 0 & 1 & 0 & -1 \\ 0 & 2 & 1 & -2 & 0 & 2 & 0 & -2 \\ 0 & 3 & 0 & -2 & 0 & 3 & 0 & -3 \\ 0 & 2 & 0 & -2 & 1 & 2 & 0 & -2 \\ 0 & 1 & 0 & -1 & 0 & 2 & 0 & -1 \\ 0 & 1 & 0 & -1 & 0 & 1 & 1 & -1 \\ 0 & 1 & 0 & -1 & 0 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 1 & 0 & -1 & 2 & 0 & -1 \\ -3 & -1 & 2 & 0 & -1 & 2 & 0 & -1 \\ -3 & -1 & 2 & 0 & -2 & 4 & -1 & -1 \\ -5 & -1 & 3 & 0 & -3 & 5 & 0 & -2 \\ -4 & -1 & 2 & 0 & -2 & 4 & 0 & -1 \\ -3 & -1 & 2 & 0 & -2 & 3 & 0 & 0 \\ -2 & -1 & 1 & 0 & -1 & 2 & 0 & 0 \\ -1 & 0 & 1 & -1 & 0 & 1 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 0 & 1 & 0 & 0 & -2 & 2 & -1 & 1 \\ -1 & 2 & 0 & 0 & -2 & 2 & -2 & 2 \\ -1 & 3 & 1 & -1 & -3 & 3 & -2 & 2 \\ -2 & 4 & 1 & -1 & -4 & 4 & -3 & 3 \\ -2 & 3 & 1 & -1 & -3 & 3 & -2 & 3 \\ -1 & 2 & 1 & -1 & -2 & 2 & -2 & 3 \\ 0 & 2 & 0 & -1 & -1 & 1 & -1 & 2 \\ 0 & 1 & 0 & -1 & 0 & 1 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 0 & -1 & 1 & 1 & -2 & 0 \\ 0 & 0 & 0 & -1 & 2 & 1 & -3 & 0 \\ 1 & 1 & 0 & -2 & 2 & 2 & -4 & 0 \\ 1 & 1 & 0 & -3 & 4 & 2 & -5 & -1 \\ 1 & 1 & 0 & -3 & 4 & 1 & -4 & 0 \\ 1 & 0 & 0 & -2 & 3 & 1 & -3 & 0 \\ 1 & 0 & -1 & -1 & 2 & 1 & -2 & 0 \\ 0 & 0 & 0 & -1 & 1 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 2 & -2 & 0 & 0 & 0 & 0 \\ -1 & 2 & 3 & -3 & 1 & -1 & 0 & 0 \\ -1 & 2 & 4 & -4 & 1 & 0 & -1 & 0 \\ -1 & 4 & 5 & -6 & 2 & -1 & -1 & 0 \\ -1 & 3 & 4 & -5 & 2 & -1 & -1 & 1 \\ 0 & 2 & 3 & -4 & 2 & -1 & -1 & 1 \\ 0 & 1 & 2 & -3 & 2 & -1 & 0 & 0 \\ 0 & 1 & 1 & -2 & 1 & 0 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 0 & -1 & -2 & 2 & 0 & 0 & 0 & 0 \\ 1 & -2 & -3 & 3 & -1 & 1 & 0 & 0 \\ 1 & -2 & -4 & 4 & -1 & 0 & 1 & 0 \\ 1 & -4 & -5 & 6 & -2 & 1 & 1 & 0 \\ 1 & -3 & -4 & 5 & -2 & 1 & 1 & -1 \\ 0 & -2 & -3 & 4 & -2 & 1 & 1 & -1 \\ 0 & -1 & -2 & 3 & -2 & 1 & 0 & 0 \\ 0 & -1 & -1 & 2 & -1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 0 & 1 & -1 & -1 & 2 & 0 \\ 0 & 0 & 0 & 1 & -2 & -1 & 3 & 0 \\ -1 & -1 & 0 & 2 & -2 & -2 & 4 & 0 \\ -1 & -1 & 0 & 3 & -4 & -2 & 5 & 1 \\ -1 & -1 & 0 & 3 & -4 & -1 & 4 & 0 \\ -1 & 0 & 0 & 2 & -3 & -1 & 3 & 0 \\ -1 & 0 & 1 & 1 & -2 & -1 & 2 & 0 \\ 0 & 0 & 0 & 1 & -1 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 0 & 1 & 0 & -1 & 0 & 1 \\ 0 & -2 & 0 & 1 & 0 & -1 & 0 & 1 \\ 0 & -2 & -1 & 2 & 0 & -2 & 0 & 2 \\ 0 & -3 & 0 & 2 & 0 & -3 & 0 & 3 \\ 0 & -2 & 0 & 2 & -1 & -2 & 0 & 2 \\ 0 & -1 & 0 & 1 & 0 & -2 & 0 & 1 \\ 0 & -1 & 0 & 1 & 0 & -1 & -1 & 1 \\ 0 & -1 & 0 & 1 & 0 & -1 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 0 & -1 & 0 & 0 & 2 & -2 & 1 & -1 \\ 1 & -2 & 0 & 0 & 2 & -2 & 2 & -2 \\ 1 & -3 & -1 & 1 & 3 & -3 & 2 & -2 \\ 2 & -4 & -1 & 1 & 4 & -4 & 3 & -3 \\ 2 & -3 & -1 & 1 & 3 & -3 & 2 & -3 \\ 1 & -2 & -1 & 1 & 2 & -2 & 2 & -3 \\ 0 & -2 & 0 & 1 & 1 & -1 & 1 & -2 \\ 0 & -1 & 0 & 1 & 0 & -1 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 1 & 1 & -1 & 0 & 1 & -2 & 0 & 1 \\ 3 & 1 & -2 & 0 & 1 & -2 & 0 & 1 \\ 3 & 1 & -2 & 0 & 2 & -4 & 1 & 1 \\ 5 & 1 & -3 & 0 & 3 & -5 & 0 & 2 \\ 4 & 1 & -2 & 0 & 2 & -4 & 0 & 1 \\ 3 & 1 & -2 & 0 & 2 & -3 & 0 & 0 \\ 2 & 1 & -1 & 0 & 1 & -2 & 0 & 0 \\ 1 & 0 & -1 & 1 & 0 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 2 & 0 & -1 & 0 & 0 & 0 & 1 & -1 \\ 2 & 0 & -2 & 1 & 0 & -1 & 2 & -1 \\ 3 & -1 & -2 & 1 & 0 & -1 & 3 & -2 \\ 4 & -1 & -4 & 2 & 0 & -1 & 4 & -3 \\ 3 & -1 & -3 & 1 & 1 & -1 & 3 & -2 \\ 2 & -1 & -2 & 1 & 0 & 0 & 2 & -1 \\ 1 & 0 & -1 & 0 & 0 & 0 & 2 & -1 \\ 1 & 0 & -1 & 0 & 0 & 0 & 1 & 0 \end{pmatrix}, \\
\begin{pmatrix} 0 & -2 & 0 & 1 & -1 & 1 & 1 & -1 \\ -1 & -3 & 0 & 2 & -1 & 0 & 2 & -1 \\ 0 & -4 & -1 & 3 & -2 & 1 & 2 & -1 \\ -1 & -5 & -1 & 4 & -3 & 1 & 4 & -2 \\ -1 & -4 & -1 & 3 & -2 & 1 & 3 & -1 \\ -1 & -3 & 0 & 2 & -2 & 1 & 2 & 0 \\ -1 & -2 & 0 & 1 & -1 & 1 & 1 & 0 \\ 0 & -1 & 0 & 0 & 0 & 0 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & -1 & 1 & -2 & 1 & 0 & 1 \\ 1 & 0 & -2 & 2 & -2 & 0 & 0 & 2 \\ 2 & 0 & -2 & 2 & -3 & 0 & 1 & 2 \\ 2 & 0 & -3 & 3 & -4 & 0 & 1 & 3 \\ 1 & 0 & -2 & 2 & -3 & 0 & 1 & 3 \\ 1 & 0 & -1 & 1 & -2 & 0 & 0 & 3 \\ 1 & 1 & -1 & 0 & -1 & 0 & 0 & 2 \\ 1 & 0 & -1 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 2 & -1 & -1 & 0 & 1 & 0 & -1 & 0 \\ 2 & -2 & -2 & 1 & 2 & -1 & -1 & 0 \\ 4 & -2 & -3 & 1 & 2 & -1 & -1 & 0 \\ 5 & -3 & -4 & 1 & 4 & -2 & -1 & -1 \\ 4 & -2 & -3 & 0 & 4 & -2 & -1 & 0 \\ 3 & -2 & -2 & 0 & 3 & -1 & -1 & 0 \\ 2 & -1 & -2 & 0 & 2 & 0 & -1 & 0 \\ 1 & -1 & -1 & 0 & 1 & 0 & 0 & 0 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} 1 & 0 & 1 & -1 & 0 & -1 & 1 & 0 \\ 1 & 0 & 1 & -1 & 1 & -3 & 2 & 0 \\ 2 & -1 & 1 & -1 & 1 & -3 & 2 & 0 \\ 3 & 0 & 1 & -2 & 2 & -5 & 3 & 0 \\ 2 & 0 & 1 & -2 & 2 & -4 & 2 & 1 \\ 2 & 0 & 1 & -2 & 2 & -3 & 1 & 1 \\ 1 & 0 & 1 & -2 & 2 & -2 & 1 & 0 \\ 1 & 0 & 0 & -1 & 1 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 0 & -1 & 1 & 0 & 1 & -1 & 0 \\ -1 & 0 & -1 & 1 & -1 & 3 & -2 & 0 \\ -2 & 1 & -1 & 1 & -1 & 3 & -2 & 0 \\ -3 & 0 & -1 & 2 & -2 & 5 & -3 & 0 \\ -2 & 0 & -1 & 2 & -2 & 4 & -2 & -1 \\ -2 & 0 & -1 & 2 & -2 & 3 & -1 & -1 \\ -1 & 0 & -1 & 2 & -2 & 2 & -1 & 0 \\ -1 & 0 & 0 & 1 & -1 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} -2 & 1 & 1 & 0 & -1 & 0 & 1 & 0 \\ -2 & 2 & 2 & -1 & -2 & 1 & 1 & 0 \\ -4 & 2 & 3 & -1 & -2 & 1 & 1 & 0 \\ -5 & 3 & 4 & -1 & -4 & 2 & 1 & 1 \\ -4 & 2 & 3 & 0 & -4 & 2 & 1 & 0 \\ -3 & 2 & 2 & 0 & -3 & 1 & 1 & 0 \\ -2 & 1 & 2 & 0 & -2 & 0 & 1 & 0 \\ -1 & 1 & 1 & 0 & -1 & 0 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} -2 & 0 & 1 & 0 & 0 & 0 & -1 & 1 \\ -2 & 0 & 2 & -1 & 0 & 1 & -2 & 1 \\ -3 & 1 & 2 & -1 & 0 & 1 & -3 & 2 \\ -4 & 1 & 4 & -2 & 0 & 1 & -4 & 3 \\ -3 & 1 & 3 & -1 & -1 & 1 & -3 & 2 \\ -2 & 1 & 2 & -1 & 0 & 0 & -2 & 1 \\ -1 & 0 & 1 & 0 & 0 & 0 & -2 & 1 \\ -1 & 0 & 1 & 0 & 0 & 0 & -1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 1 & -1 & 2 & -1 & 0 & -1 \\ -1 & 0 & 2 & -2 & 2 & 0 & 0 & -2 \\ -2 & 0 & 2 & -2 & 3 & 0 & -1 & -2 \\ -2 & 0 & 3 & -3 & 4 & 0 & -1 & -3 \\ -1 & 0 & 2 & -2 & 3 & 0 & -1 & -3 \\ -1 & 0 & 1 & -1 & 2 & 0 & 0 & -3 \\ -1 & -1 & 1 & 0 & 1 & 0 & 0 & -2 \\ -1 & 0 & 1 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 2 & 0 & -1 & 1 & -1 & -1 & 1 \\ 1 & 3 & 0 & -2 & 1 & 0 & -2 & 1 \\ 0 & 4 & 1 & -3 & 2 & -1 & -2 & 1 \\ 1 & 5 & 1 & -4 & 3 & -1 & -4 & 2 \\ 1 & 4 & 1 & -3 & 2 & -1 & -3 & 1 \\ 1 & 3 & 0 & -2 & 2 & -1 & -2 & 0 \\ 1 & 2 & 0 & -1 & 1 & -1 & -1 & 0 \\ 0 & 1 & 0 & 0 & 0 & 0 & -1 & 0 \end{pmatrix}, \\
\begin{pmatrix} 1 & 1 & 0 & -1 & 0 & 1 & 0 & -1 \\ 0 & 2 & 0 & -1 & 0 & 1 & 0 & -1 \\ 0 & 2 & 1 & -2 & 0 & 2 & 0 & -2 \\ 0 & 3 & 0 & -2 & 0 & 3 & 0 & -3 \\ 0 & 2 & 0 & -1 & 0 & 2 & 0 & -3 \\ 0 & 1 & 0 & 0 & -1 & 2 & 0 & -2 \\ 0 & 1 & 0 & 0 & -1 & 1 & 1 & -2 \\ 0 & 1 & 0 & 0 & -1 & 1 & 0 & -1 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 1 & 0 & -1 & 2 & 0 & -1 \\ -3 & -1 & 2 & 0 & -1 & 2 & 0 & -1 \\ -3 & -1 & 2 & 0 & -2 & 4 & -1 & -1 \\ -5 & -1 & 3 & 0 & -3 & 5 & 0 & -2 \\ -4 & -1 & 2 & 1 & -3 & 4 & 0 & -2 \\ -3 & -1 & 2 & 1 & -3 & 3 & 0 & -1 \\ -2 & -1 & 1 & 1 & -2 & 2 & 0 & -1 \\ -1 & 0 & 1 & 0 & -1 & 1 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 0 & 0 & -2 & 2 & -1 & 1 \\ -1 & 2 & 0 & 0 & -2 & 2 & -2 & 2 \\ -1 & 3 & 1 & -1 & -3 & 3 & -2 & 2 \\ -2 & 4 & 1 & -1 & -4 & 4 & -3 & 3 \\ -2 & 3 & 1 & 0 & -4 & 3 & -2 & 2 \\ -1 & 2 & 1 & 0 & -3 & 2 & -2 & 2 \\ 0 & 2 & 0 & 0 & -2 & 1 & -1 & 1 \\ 0 & 1 & 0 & 0 & -1 & 1 & -1 & 0 \end{pmatrix}, \\
\begin{pmatrix} 1 & 0 & 0 & -1 & 1 & 1 & -2 & 0 \\ 0 & 0 & 0 & -1 & 2 & 1 & -3 & 0 \\ 1 & 1 & 0 & -2 & 2 & 2 & -4 & 0 \\ 1 & 1 & 0 & -3 & 4 & 2 & -5 & -1 \\ 1 & 1 & 0 & -2 & 3 & 1 & -4 & -1 \\ 1 & 0 & 0 & -1 & 2 & 1 & -3 & -1 \\ 1 & 0 & -1 & 0 & 1 & 1 & -2 & -1 \\ 0 & 0 & 0 & 0 & 0 & 1 & -1 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 2 & -2 & 0 & 0 & 0 & 0 \\ -1 & 2 & 3 & -3 & 1 & -1 & 0 & 0 \\ -1 & 2 & 4 & -4 & 1 & 0 & -1 & 0 \\ -1 & 4 & 5 & -6 & 2 & -1 & -1 & 0 \\ -1 & 3 & 4 & -4 & 1 & -1 & -1 & 0 \\ 0 & 2 & 3 & -3 & 1 & -1 & -1 & 0 \\ 0 & 1 & 2 & -2 & 1 & -1 & 0 & -1 \\ 0 & 1 & 1 & -1 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & -1 & -2 & 2 & 0 & 0 & 0 & 0 \\ 1 & -2 & -3 & 3 & -1 & 1 & 0 & 0 \\ 1 & -2 & -4 & 4 & -1 & 0 & 1 & 0 \\ 1 & -4 & -5 & 6 & -2 & 1 & 1 & 0 \\ 1 & -3 & -4 & 4 & -1 & 1 & 1 & 0 \\ 0 & -2 & -3 & 3 & -1 & 1 & 1 & 0 \\ 0 & -1 & -2 & 2 & -1 & 1 & 0 & 1 \\ 0 & -1 & -1 & 1 & 0 & 0 & 0 & 1 \end{pmatrix}, \\
\begin{pmatrix} -1 & 0 & 0 & 1 & -1 & -1 & 2 & 0 \\ 0 & 0 & 0 & 1 & -2 & -1 & 3 & 0 \\ -1 & -1 & 0 & 2 & -2 & -2 & 4 & 0 \\ -1 & -1 & 0 & 3 & -4 & -2 & 5 & 1 \\ -1 & -1 & 0 & 2 & -3 & -1 & 4 & 1 \\ -1 & 0 & 0 & 1 & -2 & -1 & 3 & 1 \\ -1 & 0 & 1 & 0 & -1 & -1 & 2 & 1 \\ 0 & 0 & 0 & 0 & 0 & -1 & 1 & 1 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 0 & 1 & 0 & -1 & 0 & 1 \\ 0 & -2 & 0 & 1 & 0 & -1 & 0 & 1 \\ 0 & -2 & -1 & 2 & 0 & -2 & 0 & 2 \\ 0 & -3 & 0 & 2 & 0 & -3 & 0 & 3 \\ 0 & -2 & 0 & 1 & 0 & -2 & 0 & 3 \\ 0 & -1 & 0 & 0 & 1 & -2 & 0 & 2 \\ 0 & -1 & 0 & 0 & 1 & -1 & -1 & 2 \\ 0 & -1 & 0 & 0 & 1 & -1 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 0 & 0 & 2 & -2 & 1 & -1 \\ 1 & -2 & 0 & 0 & 2 & -2 & 2 & -2 \\ 1 & -3 & -1 & 1 & 3 & -3 & 2 & -2 \\ 2 & -4 & -1 & 1 & 4 & -4 & 3 & -3 \\ 2 & -3 & -1 & 0 & 4 & -3 & 2 & -2 \\ 1 & -2 & -1 & 0 & 3 & -2 & 2 & -2 \\ 0 & -2 & 0 & 0 & 2 & -1 & 1 & -1 \\ 0 & -1 & 0 & 0 & 1 & -1 & 1 & 0 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} 1 & 1 & -1 & 0 & 1 & -2 & 0 & 1 \\ 3 & 1 & -2 & 0 & 1 & -2 & 0 & 1 \\ 3 & 1 & -2 & 0 & 2 & -4 & 1 & 1 \\ 5 & 1 & -3 & 0 & 3 & -5 & 0 & 2 \\ 4 & 1 & -2 & -1 & 3 & -4 & 0 & 2 \\ 3 & 1 & -2 & -1 & 3 & -3 & 0 & 1 \\ 2 & 1 & -1 & -1 & 2 & -2 & 0 & 1 \\ 1 & 0 & -1 & 0 & 1 & -1 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 2 & 0 & -1 & 0 & 0 & 0 & 1 & -1 \\ 2 & 0 & -2 & 1 & 0 & -1 & 2 & -1 \\ 3 & -1 & -2 & 1 & 0 & -1 & 3 & -2 \\ 4 & -1 & -4 & 2 & 0 & -1 & 4 & -3 \\ 3 & -1 & -3 & 2 & 0 & -1 & 3 & -3 \\ 2 & -1 & -2 & 2 & -1 & 0 & 2 & -2 \\ 1 & 0 & -1 & 1 & -1 & 0 & 2 & -2 \\ 1 & 0 & -1 & 1 & -1 & 0 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 0 & -2 & 0 & 1 & -1 & 1 & 1 & -1 \\ -1 & -3 & 0 & 2 & -1 & 0 & 2 & -1 \\ 0 & -4 & -1 & 3 & -2 & 1 & 2 & -1 \\ -1 & -5 & -1 & 4 & -3 & 1 & 4 & -2 \\ -1 & -4 & -1 & 4 & -3 & 1 & 3 & -2 \\ -1 & -3 & 0 & 3 & -3 & 1 & 2 & -1 \\ -1 & -2 & 0 & 2 & -2 & 1 & 1 & -1 \\ 0 & -1 & 0 & 1 & -1 & 0 & 1 & -1 \end{pmatrix}, \\
\begin{pmatrix} 1 & 0 & -1 & 1 & -2 & 1 & 0 & 1 \\ 1 & 0 & -2 & 2 & -2 & 0 & 0 & 2 \\ 2 & 0 & -2 & 2 & -3 & 0 & 1 & 2 \\ 2 & 0 & -3 & 3 & -4 & 0 & 1 & 3 \\ 1 & 0 & -2 & 3 & -4 & 0 & 1 & 2 \\ 1 & 0 & -1 & 2 & -3 & 0 & 0 & 2 \\ 1 & 1 & -1 & 1 & -2 & 0 & 0 & 1 \\ 1 & 0 & -1 & 1 & -1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 2 & -1 & -1 & 0 & 1 & 0 & -1 & 0 \\ 2 & -2 & -2 & 1 & 2 & -1 & -1 & 0 \\ 4 & -2 & -3 & 1 & 2 & -1 & -1 & 0 \\ 5 & -3 & -4 & 1 & 4 & -2 & -1 & -1 \\ 4 & -2 & -3 & 1 & 3 & -2 & -1 & -1 \\ 3 & -2 & -2 & 1 & 2 & -1 & -1 & -1 \\ 2 & -1 & -2 & 1 & 1 & 0 & -1 & -1 \\ 1 & -1 & -1 & 1 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 1 & -1 & 0 & -1 & 1 & 0 \\ 1 & 0 & 1 & -1 & 1 & -3 & 2 & 0 \\ 2 & -1 & 1 & -1 & 1 & -3 & 2 & 0 \\ 3 & 0 & 1 & -2 & 2 & -5 & 3 & 0 \\ 2 & 0 & 1 & -1 & 1 & -4 & 2 & 0 \\ 2 & 0 & 1 & -1 & 1 & -3 & 1 & 0 \\ 1 & 0 & 1 & -1 & 1 & -2 & 1 & -1 \\ 1 & 0 & 0 & 0 & 0 & -1 & 1 & -1 \end{pmatrix}, \\
\begin{pmatrix} -1 & 0 & -1 & 1 & 0 & 1 & -1 & 0 \\ -1 & 0 & -1 & 1 & -1 & 3 & -2 & 0 \\ -2 & 1 & -1 & 1 & -1 & 3 & -2 & 0 \\ -3 & 0 & -1 & 2 & -2 & 5 & -3 & 0 \\ -2 & 0 & -1 & 1 & -1 & 4 & -2 & 0 \\ -2 & 0 & -1 & 1 & -1 & 3 & -1 & 0 \\ -1 & 0 & -1 & 1 & -1 & 2 & -1 & 1 \\ -1 & 0 & 0 & 0 & 0 & 1 & -1 & 1 \end{pmatrix}, \begin{pmatrix} -2 & 1 & 1 & 0 & -1 & 0 & 1 & 0 \\ -2 & 2 & 2 & -1 & -2 & 1 & 1 & 0 \\ -4 & 2 & 3 & -1 & -2 & 1 & 1 & 0 \\ -5 & 3 & 4 & -1 & -4 & 2 & 1 & 1 \\ -4 & 2 & 3 & -1 & -3 & 2 & 1 & 1 \\ -3 & 2 & 2 & -1 & -2 & 1 & 1 & 1 \\ -2 & 1 & 2 & -1 & -1 & 0 & 1 & 1 \\ -1 & 1 & 1 & -1 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} -2 & 0 & 1 & 0 & 0 & 0 & -1 & 1 \\ -2 & 0 & 2 & -1 & 0 & 1 & -2 & 1 \\ -3 & 1 & 2 & -1 & 0 & 1 & -3 & 2 \\ -4 & 1 & 4 & -2 & 0 & 1 & -4 & 3 \\ -3 & 1 & 3 & -2 & 0 & 1 & -3 & 3 \\ -2 & 1 & 2 & -2 & 1 & 0 & -2 & 2 \\ -1 & 0 & 1 & -1 & 1 & 0 & -2 & 2 \\ -1 & 0 & 1 & -1 & 1 & 0 & -1 & 1 \end{pmatrix}, \\
\begin{pmatrix} -1 & 0 & 1 & -1 & 2 & -1 & 0 & -1 \\ -1 & 0 & 2 & -2 & 2 & 0 & 0 & -2 \\ -2 & 0 & 2 & -2 & 3 & 0 & -1 & -2 \\ -2 & 0 & 3 & -3 & 4 & 0 & -1 & -3 \\ -1 & 0 & 2 & -3 & 4 & 0 & -1 & -2 \\ -1 & 0 & 1 & -2 & 3 & 0 & 0 & -2 \\ -1 & -1 & 1 & -1 & 2 & 0 & 0 & -1 \\ -1 & 0 & 1 & -1 & 1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 2 & 0 & -1 & 1 & -1 & -1 & 1 \\ 1 & 3 & 0 & -2 & 1 & 0 & -2 & 1 \\ 0 & 4 & 1 & -3 & 2 & -1 & -2 & 1 \\ 1 & 5 & 1 & -4 & 3 & -1 & -4 & 2 \\ 1 & 4 & 1 & -4 & 3 & -1 & -3 & 2 \\ 1 & 3 & 0 & -3 & 3 & -1 & -2 & 1 \\ 1 & 2 & 0 & -2 & 2 & -1 & -1 & 1 \\ 0 & 1 & 0 & -1 & 1 & 0 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 2 & 0 & -1 & 0 & 0 & 0 & 1 & -1 \\ 2 & 0 & -1 & 0 & 0 & 0 & 1 & 0 \\ 3 & -1 & -1 & 0 & 0 & 0 & 2 & -1 \\ 4 & -1 & -2 & 0 & 0 & 1 & 2 & -1 \\ 3 & -1 & -2 & 0 & 1 & 0 & 2 & -1 \\ 2 & -1 & -2 & 1 & 0 & 0 & 2 & -1 \\ 1 & 0 & -1 & 0 & 0 & 0 & 2 & -1 \\ 1 & 0 & -1 & 0 & 0 & 0 & 1 & 0 \end{pmatrix}, \\
\begin{pmatrix} 0 & -2 & 0 & 1 & -1 & 1 & 1 & -1 \\ -1 & -3 & 1 & 1 & -1 & 1 & 1 & 0 \\ 0 & -4 & 0 & 2 & -2 & 2 & 1 & 0 \\ -1 & -5 & 1 & 2 & -3 & 3 & 2 & 0 \\ -1 & -4 & 0 & 2 & -2 & 2 & 2 & 0 \\ -1 & -3 & 0 & 2 & -2 & 1 & 2 & 0 \\ -1 & -2 & 0 & 1 & -1 & 1 & 1 & 0 \\ 0 & -1 & 0 & 0 & 0 & 0 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & -1 & 1 & -2 & 1 & 0 & 1 \\ 1 & 0 & -1 & 1 & -2 & 1 & -1 & 3 \\ 2 & 0 & -1 & 1 & -3 & 1 & 0 & 3 \\ 2 & 0 & -1 & 1 & -4 & 2 & -1 & 5 \\ 1 & 0 & -1 & 1 & -3 & 1 & 0 & 4 \\ 1 & 0 & -1 & 1 & -2 & 0 & 0 & 3 \\ 1 & 1 & -1 & 0 & -1 & 0 & 0 & 2 \\ 1 & 0 & -1 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 2 & -1 & -1 & 0 & 1 & 0 & -1 & 0 \\ 2 & -2 & -1 & 0 & 2 & 0 & -2 & 1 \\ 4 & -2 & -2 & 0 & 2 & 0 & -2 & 1 \\ 5 & -3 & -2 & -1 & 4 & 0 & -3 & 1 \\ 4 & -2 & -2 & -1 & 4 & -1 & -2 & 1 \\ 3 & -2 & -2 & 0 & 3 & -1 & -1 & 0 \\ 2 & -1 & -2 & 0 & 2 & 0 & -1 & 0 \\ 1 & -1 & -1 & 0 & 1 & 0 & 0 & 0 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} 1 & 0 & 1 & -1 & 0 & -1 & 1 & 0 \\ 1 & 0 & 2 & -2 & 1 & -2 & 1 & 1 \\ 2 & -1 & 2 & -2 & 1 & -2 & 1 & 1 \\ 3 & 0 & 3 & -4 & 2 & -3 & 1 & 2 \\ 2 & 0 & 2 & -3 & 2 & -3 & 1 & 2 \\ 2 & 0 & 1 & -2 & 2 & -3 & 1 & 1 \\ 1 & 0 & 1 & -2 & 2 & -2 & 1 & 0 \\ 1 & 0 & 0 & -1 & 1 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 0 & -1 & 1 & 0 & 1 & -1 & 0 \\ -1 & 0 & -2 & 2 & -1 & 2 & -1 & -1 \\ -2 & 1 & -2 & 2 & -1 & 2 & -1 & -1 \\ -3 & 0 & -3 & 4 & -2 & 3 & -1 & -2 \\ -2 & 0 & -2 & 3 & -2 & 3 & -1 & -2 \\ -2 & 0 & -1 & 2 & -2 & 3 & -1 & -1 \\ -1 & 0 & -1 & 2 & -2 & 2 & -1 & 0 \\ -1 & 0 & 0 & 1 & -1 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} -2 & 1 & 1 & 0 & -1 & 0 & 1 & 0 \\ -2 & 2 & 1 & 0 & -2 & 0 & 2 & -1 \\ -4 & 2 & 2 & 0 & -2 & 0 & 2 & -1 \\ -5 & 3 & 2 & 1 & -4 & 0 & 3 & -1 \\ -4 & 2 & 2 & 1 & -4 & 1 & 2 & -1 \\ -3 & 2 & 2 & 0 & -3 & 1 & 1 & 0 \\ -2 & 1 & 2 & 0 & -2 & 0 & 1 & 0 \\ -1 & 1 & 1 & 0 & -1 & 0 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} -2 & 0 & 1 & 0 & 0 & 0 & -1 & 1 \\ -2 & 0 & 1 & 0 & 0 & 0 & -1 & 0 \\ -3 & 1 & 1 & 0 & 0 & 0 & -2 & 1 \\ -4 & 1 & 2 & 0 & 0 & -1 & -2 & 1 \\ -3 & 1 & 2 & 0 & -1 & 0 & -2 & 1 \\ -2 & 1 & 2 & -1 & 0 & 0 & -2 & 1 \\ -1 & 0 & 1 & 0 & 0 & 0 & -2 & 1 \\ -1 & 0 & 1 & 0 & 0 & 0 & -1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 1 & -1 & 2 & -1 & 0 & -1 \\ -1 & 0 & 1 & -1 & 2 & -1 & 1 & -3 \\ -2 & 0 & 1 & -1 & 3 & -1 & 0 & -3 \\ -2 & 0 & 1 & -1 & 4 & -2 & 1 & -5 \\ -1 & 0 & 1 & -1 & 3 & -1 & 0 & -4 \\ -1 & 0 & 1 & -1 & 2 & 0 & 0 & -3 \\ -1 & -1 & 1 & 0 & 1 & 0 & 0 & -2 \\ -1 & 0 & 1 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 2 & 0 & -1 & 1 & -1 & -1 & 1 \\ 1 & 3 & -1 & -1 & 1 & -1 & -1 & 0 \\ 0 & 4 & 0 & -2 & 2 & -2 & -1 & 0 \\ 1 & 5 & -1 & -2 & 3 & -3 & -2 & 0 \\ 1 & 4 & 0 & -2 & 2 & -2 & -2 & 0 \\ 1 & 3 & 0 & -2 & 2 & -1 & -2 & 0 \\ 1 & 2 & 0 & -1 & 1 & -1 & -1 & 0 \\ 0 & 1 & 0 & 0 & 0 & 0 & -1 & 0 \end{pmatrix}, \\
\begin{pmatrix} 2 & 0 & -1 & 0 & 0 & 0 & 1 & -1 \\ 2 & 0 & -1 & 0 & 0 & 0 & 1 & 0 \\ 3 & -1 & -1 & 0 & 0 & 0 & 2 & -1 \\ 4 & -1 & -2 & 0 & 0 & 1 & 2 & -1 \\ 3 & -1 & -1 & 0 & 0 & 1 & 1 & -1 \\ 2 & -1 & -1 & 1 & -1 & 1 & 1 & -1 \\ 1 & 0 & 0 & 0 & -1 & 1 & 1 & -1 \\ 1 & 0 & 0 & 0 & -1 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -2 & 0 & 1 & -1 & 1 & 1 & -1 \\ -1 & -3 & 1 & 1 & -1 & 1 & 1 & 0 \\ 0 & -4 & 0 & 2 & -2 & 2 & 1 & 0 \\ -1 & -5 & 1 & 2 & -3 & 3 & 2 & 0 \\ -1 & -4 & 1 & 2 & -3 & 3 & 1 & 0 \\ -1 & -3 & 1 & 2 & -3 & 2 & 1 & 0 \\ -1 & -2 & 1 & 1 & -2 & 2 & 0 & 0 \\ 0 & -1 & 1 & 0 & -1 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & -1 & 1 & -2 & 1 & 0 & 1 \\ 1 & 0 & -1 & 1 & -2 & 1 & -1 & 3 \\ 2 & 0 & -1 & 1 & -3 & 1 & 0 & 3 \\ 2 & 0 & -1 & 1 & -4 & 2 & -1 & 5 \\ 1 & 0 & 0 & 1 & -4 & 2 & -1 & 4 \\ 1 & 0 & 0 & 1 & -3 & 1 & -1 & 3 \\ 1 & 1 & 0 & 0 & -2 & 1 & -1 & 2 \\ 1 & 0 & 0 & 0 & -1 & 1 & -1 & 1 \end{pmatrix}, \\
\begin{pmatrix} 2 & -1 & -1 & 0 & 1 & 0 & -1 & 0 \\ 2 & -2 & -1 & 0 & 2 & 0 & -2 & 1 \\ 4 & -2 & -2 & 0 & 2 & 0 & -2 & 1 \\ 5 & -3 & -2 & -1 & 4 & 0 & -3 & 1 \\ 4 & -2 & -1 & -1 & 3 & 0 & -3 & 1 \\ 3 & -2 & -1 & 0 & 2 & 0 & -2 & 0 \\ 2 & -1 & -1 & 0 & 1 & 1 & -2 & 0 \\ 1 & -1 & 0 & 0 & 0 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 1 & -1 & 0 & -1 & 1 & 0 \\ 1 & 0 & 2 & -2 & 1 & -2 & 1 & 1 \\ 2 & -1 & 2 & -2 & 1 & -2 & 1 & 1 \\ 3 & 0 & 3 & -4 & 2 & -3 & 1 & 2 \\ 2 & 0 & 3 & -3 & 1 & -2 & 0 & 2 \\ 2 & 0 & 2 & -2 & 1 & -2 & 0 & 1 \\ 1 & 0 & 2 & -2 & 1 & -1 & 0 & 0 \\ 1 & 0 & 1 & -1 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 0 & -1 & 1 & 0 & 1 & -1 & 0 \\ -1 & 0 & -2 & 2 & -1 & 2 & -1 & -1 \\ -2 & 1 & -2 & 2 & -1 & 2 & -1 & -1 \\ -3 & 0 & -3 & 4 & -2 & 3 & -1 & -2 \\ -2 & 0 & -3 & 3 & -1 & 2 & 0 & -2 \\ -2 & 0 & -2 & 2 & -1 & 2 & 0 & -1 \\ -1 & 0 & -2 & 2 & -1 & 1 & 0 & 0 \\ -1 & 0 & -1 & 1 & 0 & 0 & 0 & 0 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} -2 & 1 & 1 & 0 & -1 & 0 & 1 & 0 \\ -2 & 2 & 1 & 0 & -2 & 0 & 2 & -1 \\ -4 & 2 & 2 & 0 & -2 & 0 & 2 & -1 \\ -5 & 3 & 2 & 1 & -4 & 0 & 3 & -1 \\ -4 & 2 & 1 & 1 & -3 & 0 & 3 & -1 \\ -3 & 2 & 1 & 0 & -2 & 0 & 2 & 0 \\ -2 & 1 & 1 & 0 & -1 & -1 & 2 & 0 \\ -1 & 1 & 0 & 0 & 0 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} -2 & 0 & 1 & 0 & 0 & 0 & -1 & 1 \\ -2 & 0 & 1 & 0 & 0 & 0 & -1 & 0 \\ -3 & 1 & 1 & 0 & 0 & 0 & -2 & 1 \\ -4 & 1 & 2 & 0 & 0 & -1 & -2 & 1 \\ -3 & 1 & 1 & 0 & 0 & -1 & -1 & 1 \\ -2 & 1 & 1 & -1 & 1 & -1 & -1 & 1 \\ -1 & 0 & 0 & 0 & 1 & -1 & -1 & 1 \\ -1 & 0 & 0 & 0 & 1 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 1 & -1 & 2 & -1 & 0 & -1 \\ -1 & 0 & 1 & -1 & 2 & -1 & 1 & -3 \\ -2 & 0 & 1 & -1 & 3 & -1 & 0 & -3 \\ -2 & 0 & 1 & -1 & 4 & -2 & 1 & -5 \\ -1 & 0 & 0 & -1 & 4 & -2 & 1 & -4 \\ -1 & 0 & 0 & -1 & 3 & -1 & 1 & -3 \\ -1 & -1 & 0 & 0 & 2 & -1 & 1 & -2 \\ -1 & 0 & 0 & 0 & 1 & -1 & 1 & -1 \end{pmatrix}, \\
\begin{pmatrix} 0 & 2 & 0 & -1 & 1 & -1 & -1 & 1 \\ 1 & 3 & -1 & -1 & 1 & -1 & -1 & 0 \\ 0 & 4 & 0 & -2 & 2 & -2 & -1 & 0 \\ 1 & 5 & -1 & -2 & 3 & -3 & -2 & 0 \\ 1 & 4 & -1 & -2 & 3 & -3 & -1 & 0 \\ 1 & 3 & -1 & -2 & 3 & -2 & -1 & 0 \\ 1 & 2 & -1 & -1 & 2 & -2 & 0 & 0 \\ 0 & 1 & -1 & 0 & 1 & -1 & 0 & 0 \end{pmatrix}.$$

The character table of $G^{s_{17}}$:

	10										20											
$\chi_{17}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{17}^{(2)}$	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1
$\chi_{17}^{(3)}$	1	1	1	1	1	-1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	-1	1	1	1
$\chi_{17}^{(4)}$	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1
$\chi_{17}^{(5)}$	1	A	B	/A	/B	-/B	-/A	-1	-B	-A	-1	-A	-B	-/A	-/B	/B	/A	1	B	A	1	A
$\chi_{17}^{(6)}$	1	B	/A	/B	A	-A	-/B	-1	-/A	-B	-1	-B	-/A	-/B	-A	A	/B	1	/A	B	1	B
$\chi_{17}^{(7)}$	1	/B	A	B	/A	-/A	-B	-1	-A	-/B	-1	-/B	-A	-B	-/A	/A	B	1	A	/B	1	/B
$\chi_{17}^{(8)}$	1	/A	/B	A	B	-B	-A	-1	-/B	-/A	-1	-/A	-/B	-A	-B	B	A	1	/B	/A	1	/A
$\chi_{17}^{(9)}$	1	A	B	/A	/B	-/B	-/A	-1	-B	-A	1	A	B	/A	/B	-/B	-/A	-1	-B	-A	1	A
$\chi_{17}^{(10)}$	1	B	/A	/B	A	-A	-/B	-1	-/A	-B	1	B	/A	/B	A	-A	-/B	-1	-/A	-B	1	B
$\chi_{17}^{(11)}$	1	/B	A	B	/A	-/A	-B	-1	-A	-/B	1	/B	A	B	/A	-/A	-B	-1	-A	-/B	1	/B
$\chi_{17}^{(12)}$	1	/A	/B	A	B	-B	-A	-1	-/B	-/A	1	/A	/B	A	B	-B	-A	-1	-/B	-/A	1	/A
$\chi_{17}^{(13)}$	1	A	B	/A	/B	/B	/A	1	B	A	-1	-A	-B	-/A	-/B	-/B	-/A	-1	-B	-A	1	A
$\chi_{17}^{(14)}$	1	B	/A	/B	A	A	/B	1	/A	B	-1	-B	-/A	-/B	-A	-A	-/B	-1	-/A	-B	1	B
$\chi_{17}^{(15)}$	1	/B	A	B	/A	/A	B	1	A	/B	-1	-/B	-A	-B	-/A	-/A	-B	-1	-A	-/B	1	/B
$\chi_{17}^{(16)}$	1	/A	/B	A	B	B	A	1	/B	/A	-1	-/A	-/B	-A	-B	-B	-A	-1	-/B	-/A	1	/A
$\chi_{17}^{(17)}$	1	A	B	/A	/B	/B	/A	1	B	A	1	A	B	/A	/B	/B	/A	1	B	A	1	A
$\chi_{17}^{(18)}$	1	B	/A	/B	A	A	/B	1	/A	B	1	B	/A	/B	A	A	/B	1	/A	B	1	B
$\chi_{17}^{(19)}$	1	/B	A	B	/A	/A	B	1	A	/B	1	/B	A	B	/A	/A	B	1	A	/B	1	/B
$\chi_{17}^{(20)}$	1	/A	/B	A	B	B	A	1	/B	/A	1	/A	/B	A	B	B	A	1	/B	/A	1	/A
$\chi_{17}^{(21)}$	4	4	4	4	4	4	4	4	4	4	-2	-2	-2	-2	-2	-2	-2	-2	-2	1	1	
$\chi_{17}^{(22)}$	4	4	4	4	4	4	4	4	4	4	2	2	2	2	2	2	2	2	2	1	1	
$\chi_{17}^{(23)}$	4	4	4	4	4	-4	-4	-4	-4	-4	-2	-2	-2	-2	-2	2	2	2	2	2	1	
$\chi_{17}^{(24)}$	4	4	4	4	4	-4	-4	-4	-4	-4	2	2	2	2	2	-2	-2	-2	-2	-2	1	
$\chi_{17}^{(25)}$	4	C	D	/C	/D	/D	/C	4	D	C	-2	I	J	/I	/J	/J	/I	-2	J	I	1	
$\chi_{17}^{(26)}$	4	D	/C	/D	C	C	/D	4	/C	D	-2	J	/I	/J	I	I	/J	-2	/I	J	1	
$\chi_{17}^{(27)}$	4	/D	C	D	/C	/C	D	4	C	/D	-2	/J	I	J	/I	/I	J	-2	I	/J	1	
$\chi_{17}^{(28)}$	4	/C	/D	C	D	D	C	4	/D	/C	-2	/I	/J	I	J	J	I	-2	/J	/I	1	
$\chi_{17}^{(29)}$	4	C	D	/C	/D	/D	/C	4	D	C	2	-I	-J	-/I	-/J	-/J	-/I	2	-J	-I	1	
$\chi_{17}^{(30)}$	4	D	/C	/D	C	C	/D	4	/C	D	2	-J	-/I	-/J	-I	-I	-/J	2	-/I	-J	1	
$\chi_{17}^{(31)}$	4	/D	C	D	/C	/C	D	4	C	/D	2	-/J	-I	-J	-/I	-/I	-J	2	-I	-/J	1	
$\chi_{17}^{(32)}$	4	/C	/D	C	D	D	C	4	/D	/C	2	-/I	-/J	-I	-J	-J	-I	2	-/J	-/I	1	
$\chi_{17}^{(33)}$	4	C	D	/C	/D	-/D	-/C	-4	-D	-C	-2	I	J	/I	/J	-/J	-/I	2	-J	-I	1	
$\chi_{17}^{(34)}$	4	D	/C	/D	C	-C	-/D	-4	-/C	-D	-2	J	/I	/J	I	-I	-/J	2	-/I	-J	1	
$\chi_{17}^{(35)}$	4	/D	C	D	/C	-/C	-D	-4	-C	-/D	-2	/J	I	J	/I	-/I	-J	2	-I	-/J	1	
$\chi_{17}^{(36)}$	4	/C	/D	C	D	-D	-C	-4	-/D	-/C	-2	/I	/J	I	J	-J	-I	2	-/J	-/I	1	
$\chi_{17}^{(37)}$	4	C	D	/C	/D	-/D	-/C	-4	-D	-C	2	-I	-J	-/I	-/J	/J	/I	-2	J	I	1	
$\chi_{17}^{(38)}$	4	D	/C	/D	C	-C	-/D	-4	-/C	-D	2	-J	-/I	-/J	-I	I	/J	-2	/I	J	1	
$\chi_{17}^{(39)}$	4	/D	C	D	/C	-/C	-D	-4	-C	-/D	2	-/J	-I	-J	-/I	/I	J	-2	I	/J	1	
$\chi_{17}^{(40)}$	4	/C	/D	C	D	-D	-C	-4	-/D	-/C	2	-/I	-/J	-I	-J	J	I	-2	/J	/I	1	
$\chi_{17}^{(41)}$	5	5	5	5	5	5	5	5	5	5	1	1	1	1	1	1	1	1	-1	-1	-1	
$\chi_{17}^{(42)}$	5	5	5	5	5	5	5	5	5	5	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
$\chi_{17}^{(43)}$	5	5	5	5	5	-5	-5	-5	-5	-5	1	1	1	1	1	-1	-1	-1	-1	-1	-1	
$\chi_{17}^{(44)}$	5	5	5	5	5	-5	-5	-5	-5	-5	-1	-1	-1	-1	-1	1	1	1	1	-1	-1	
$\chi_{17}^{(45)}$	5	E	F	/E	/F	/F	/E	5	F	E	1	A	B	/A	/B	/B	/A	1	B	A	-1	

	10															20										
$\chi_{17}^{(46)}$	5	F	/E	/F	E	E	/F	5	/E	F	1	B	/A	/B	A	A	/B	1	/A	B	-1	-B	-/A	-/B	-A	
$\chi_{17}^{(47)}$	5	/F	E	F	/E	/E	F	5	E	/F	1	/B	A	B	/A	/A	B	1	A	/B	-1	-/B	-A	-B	-/A	
$\chi_{17}^{(48)}$	5	/E	/F	E	F	F	E	5	/F	/E	1	/A	/B	A	B	B	A	1	/B	/A	-1	-/A	-/B	-A	-B	
$\chi_{17}^{(49)}$	5	E	F	/E	/F	/F	/E	5	F	E	-1	-A	-B	-/A	-/B	-/B	-/A	-1	-B	-A	-1	-A	-B	-/A	-/B	
$\chi_{17}^{(50)}$	5	F	/E	/F	E	E	/F	5	/E	F	-1	-B	-/A	-/B	-A	-A	-/B	-1	-/A	-B	-1	-B	-/A	-/B	-A	
$\chi_{17}^{(51)}$	5	/F	E	F	/E	/E	F	5	E	/F	-1	-/B	-A	-B	-/A	-/A	-B	-1	-A	-/B	-1	-/B	-A	-B	-/A	
$\chi_{17}^{(52)}$	5	/E	/F	E	F	F	E	5	/F	/E	-1	-/A	-/B	-A	-B	-B	-A	-1	-/B	-/A	-1	-/A	-/B	-A	-B	
$\chi_{17}^{(53)}$	5	E	F	/E	/F	-/F	-/E	-5	-F	-E	1	A	B	/A	/B	-/B	-/A	-1	-B	-A	-1	-A	-B	-/A	-/B	
$\chi_{17}^{(54)}$	5	F	/E	/F	E	-E	-/F	-5	-/E	-F	1	B	/A	/B	A	-A	-/B	-1	-/A	-B	-1	-B	-/A	-/B	-A	
$\chi_{17}^{(55)}$	5	/F	E	F	/E	-/E	-F	-5	-E	-/F	1	/B	A	B	/A	-/A	-B	-1	-A	-/B	-1	-/B	-A	-B	-/A	
$\chi_{17}^{(56)}$	5	/E	/F	E	F	-F	-E	-5	-/F	-/E	1	/A	/B	A	B	-B	-A	-1	-/B	-/A	-1	-/A	-/B	-A	-B	
$\chi_{17}^{(57)}$	5	E	F	/E	/F	-/F	-/E	-5	-F	-E	-1	-A	-B	-/A	-/B	/B	/A	1	B	A	-1	-A	-B	-/A	-/B	
$\chi_{17}^{(58)}$	5	F	/E	/F	E	-E	-/F	-5	-/E	-F	-1	-B	-/A	-/B	-A	A	/B	1	/A	B	-1	-B	-/A	-/B	-A	
$\chi_{17}^{(59)}$	5	/F	E	F	/E	-/E	-F	-5	-E	-/F	-1	-/B	-A	-B	-/A	/A	B	1	A	/B	-1	-/B	-A	-B	-/A	
$\chi_{17}^{(60)}$	5	/E	/F	E	F	-F	-E	-5	-/F	-/E	-1	-/A	-/B	-A	-B	B	A	1	/B	/A	-1	-/A	-/B	-A	-B	
$\chi_{17}^{(61)}$	6	6	6	6	6	6	6	6	6	6	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{17}^{(62)}$	6	6	6	6	6	-6	-6	-6	-6	-6	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{17}^{(63)}$	6	G	H	/G	/H	/H	/G	6	H	G	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{17}^{(64)}$	6	H	/G	/H	G	G	/H	6	/G	H	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{17}^{(65)}$	6	/H	G	H	/G	/G	H	6	G	/H	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{17}^{(66)}$	6	/G	/H	G	H	H	G	6	/H	/G	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{17}^{(67)}$	6	G	H	/G	/H	-/H	-/G	-6	-H	-G	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{17}^{(68)}$	6	H	/G	/H	G	-G	-/H	-6	-/G	-H	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{17}^{(69)}$	6	/H	G	H	/G	-/G	-H	-6	-G	-/H	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{17}^{(70)}$	6	/G	/H	G	H	-H	-G	-6	-/H	-/G	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
		30															40									
$\chi_{17}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
$\chi_{17}^{(2)}$	-1	-1	-1	-1	-1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1		
$\chi_{17}^{(3)}$	-1	-1	-1	-1	-1	1	1	1	1	1	-1	-1	-1	-1	-1	1	1	1	1	1	-1	-1	-1	-1		
$\chi_{17}^{(4)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1		
$\chi_{17}^{(5)}$	-/B	-/A	-1	-B	-A	1	A	B	/A	/B	-/B	-/A	-1	-B	-A	-1	-A	-B	-/A	-/B	/B	/A	1	B		
$\chi_{17}^{(6)}$	-A	-/B	-1	-/A	-B	1	B	/A	/B	A	-A	-/B	-1	-/A	-B	-1	-B	-/A	-/B	-A	A	/B	1	/A		
$\chi_{17}^{(7)}$	-/A	-B	-1	-A	-/B	1	/B	A	B	/A	-/A	-B	-1	-A	-/B	-1	-/B	-A	-B	-/A	/A	B	1	A		
$\chi_{17}^{(8)}$	-B	-A	-1	-/B	-/A	1	/A	/B	A	B	-B	-A	-1	-/B	-/A	-1	-/A	-/B	-A	-B	B	A	1	/B		
$\chi_{17}^{(9)}$	-/B	-/A	-1	-B	-A	1	A	B	/A	/B	-/B	-/A	-1	-B	-A	1	A	B	/A	/B	-/B	-/A	-1	-B		
$\chi_{17}^{(10)}$	-A	-/B	-1	-/A	-B	1	B	/A	/B	A	-A	-/B	-1	-/A	-B	1	B	/A	/B	A	-A	-/B	-1	-/A		
$\chi_{17}^{(11)}$	-/A	-B	-1	-A	-/B	1	/B	A	B	/A	-/A	-B	-1	-A	-/B	1	/B	A	B	/A	-/A	-B	-1	-A		
$\chi_{17}^{(12)}$	-B	-A	-1	-/B	-/A	1	/A	/B	A	B	-B	-A	-1	-/B	-/A	1	/A	/B	A	B	-B	-A	-1	-/B		
$\chi_{17}^{(13)}$	/B	/A	1	B	A	1	A	B	/A	/B	/B	/A	1	B	A	-1	-A	-B	-/A	-/B	-/B	-/A	-1	-B		
$\chi_{17}^{(14)}$	A	/B	1	/A	B	1	B	/A	/B	A	A	/B	1	/A	B	-1	-B	-/A	-/B	-A	-A	-/B	-1	-/A		
$\chi_{17}^{(15)}$	/A	B	1	A	/B	1	/B	A	B	/A	/A	B	1	A	/B	-1	-/B	-A	-B	-/A	-/A	-B	-1	-A		
$\chi_{17}^{(16)}$	B	A	1	/B	/A	1	/A	/B	A	B	B	A	1	/B	/A	-1	-/A	-/B	-A	-B	-B	-A	-1	-/B		
$\chi_{17}^{(17)}$	/B	/A	1	B	A	1	A	B	/A	/B	/B	/A	1	B	A	1	A	B	/A	/B	/B	/A	1	B		
$\chi_{17}^{(18)}$	A	/B	1	/A	B	1	B	/A	/B	A	A	/B	1	/A	B	1	B	/A	/B	A	A	/B	1	/A		
$\chi_{17}^{(19)}$	/A	B	1	A	/B	1	/B	A	B	/A	/A	B	1	A	/B	1	/B	A	B	/A	/A	B	1	A		
$\chi_{17}^{(20)}$	B	A	1	/B	/A	1	/A	/B	A	B	B	A	1	/B	/A	1	/A	/B	A	B	B	A	1	/B		

	30														40													
$\chi_{17}^{(21)}$	1	1	1	1	1	.	.	.	.	.	.	.	.	.	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{17}^{(22)}$	1	1	1	1	1	.	.	.	.	.	.	.	.	.	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_{17}^{(23)}$	-1	-1	-1	-1	-1	.	.	.	.	.	.	.	.	.	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1
$\chi_{17}^{(24)}$	-1	-1	-1	-1	-1	.	.	.	.	.	.	.	.	.	-1	-1	-1	-1	-1	1	1	1	1	1	1	1
$\chi_{17}^{(25)}$	/B	/A	1	B	A	.	.	.	.	.	.	.	.	.	1	A	B	/A	/B	/B	/A	1	B			
$\chi_{17}^{(26)}$	A	/B	1	/A	B	.	.	.	.	.	.	.	.	.	1	B	/A	/B	A	A	/B	1	/A			
$\chi_{17}^{(27)}$	/A	B	1	A	/B	.	.	.	.	.	.	.	.	.	1	/B	A	B	/A	/A	B	1	A			
$\chi_{17}^{(28)}$	B	A	1	/B	/A	.	.	.	.	.	.	.	.	.	1	/A	/B	A	B	B	A	1	/B			
$\chi_{17}^{(29)}$	/B	/A	1	B	A	.	.	.	.	.	.	.	.	.	-1	-A	-B	-/A	-/B	-/B	-/A	-1	-B			
$\chi_{17}^{(30)}$	A	/B	1	/A	B	.	.	.	.	.	.	.	.	.	-1	-B	-/A	-/B	-A	-A	-/B	-1	-/A			
$\chi_{17}^{(31)}$	/A	B	1	A	/B	.	.	.	.	.	.	.	.	.	-1	-/B	-A	-B	-/A	-/A	-B	-1	-A			
$\chi_{17}^{(32)}$	B	A	1	/B	/A	.	.	.	.	.	.	.	.	.	-1	-/A	-/B	-A	-B	-B	-A	-1	-/B			
$\chi_{17}^{(33)}$	-/B	-/A	-1	-B	-A	.	.	.	.	.	.	.	.	.	1	A	B	/A	/B	-/B	-/A	-1	-B			
$\chi_{17}^{(34)}$	-A	-/B	-1	-/A	-B	.	.	.	.	.	.	.	.	.	1	B	/A	/B	A	-A	-/B	-1	-/A			
$\chi_{17}^{(35)}$	-/A	-B	-1	-A	-/B	.	.	.	.	.	.	.	.	.	1	/B	A	B	/A	-/A	-B	-1	-A			
$\chi_{17}^{(36)}$	-B	-A	-1	-/B	-/A	.	.	.	.	.	.	.	.	.	1	/A	/B	A	B	-B	-A	-1	-/B			
$\chi_{17}^{(37)}$	-/B	-/A	-1	-B	-A	.	.	.	.	.	.	.	.	.	-1	-A	-B	-/A	-/B	/B	/A	1	B			
$\chi_{17}^{(38)}$	-A	-/B	-1	-/A	-B	.	.	.	.	.	.	.	.	.	-1	-B	-/A	-/B	-A	A	/B	1	/A			
$\chi_{17}^{(39)}$	-/A	-B	-1	-A	-/B	.	.	.	.	.	.	.	.	.	-1	-/B	-A	-B	-/A	/A	B	1	A			
$\chi_{17}^{(40)}$	-B	-A	-1	-/B	-/A	.	.	.	.	.	.	.	.	.	-1	-/A	-/B	-A	-B	B	A	1	/B			
$\chi_{17}^{(41)}$	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
$\chi_{17}^{(42)}$	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1		
$\chi_{17}^{(43)}$	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	1	1	1	1	1	-1	-1	-1	-1	-1	-1		
$\chi_{17}^{(44)}$	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1		
$\chi_{17}^{(45)}$	-/B	-/A	-1	-B	-A	1	A	B	/A	/B	/B	/A	1	B	A	1	A	B	/A	/B	/B	/A	1	B				
$\chi_{17}^{(46)}$	-A	-/B	-1	-/A	-B	1	B	/A	/B	A	A	/B	1	/A	B	1	B	/A	/B	A	A	/B	1	/A				
$\chi_{17}^{(47)}$	-/A	-B	-1	-A	-/B	1	/B	A	B	/A	/A	B	1	A	/B	1	/B	A	B	/A	/A	B	1	A				
$\chi_{17}^{(48)}$	-B	-A	-1	-/B	-/A	1	/A	/B	A	B	B	A	1	/B	/A	1	/A	/B	A	B	B	A	1	/B				
$\chi_{17}^{(49)}$	-/B	-/A	-1	-B	-A	1	A	B	/A	/B	/B	/A	1	B	A	-1	-A	-B	-/A	-/B	-/B	-/A	-1	-B				
$\chi_{17}^{(50)}$	-A	-/B	-1	-/A	-B	1	B	/A	/B	A	A	/B	1	/A	B	-1	-B	-/A	-/B	-A	-A	-/B	-1	-/A				
$\chi_{17}^{(51)}$	-/A	-B	-1	-A	-/B	1	/B	A	B	/A	/A	B	1	A	/B	-1	-/B	-A	-B	-/A	-/A	-B	-1	-A				
$\chi_{17}^{(52)}$	-B	-A	-1	-/B	-/A	1	/A	/B	A	B	B	A	1	/B	/A	-1	-/A	-/B	-A	-B	-B	-A	-1	-/B				
$\chi_{17}^{(53)}$	/B	/A	1	B	A	1	A	B	/A	/B	-/B	-/A	-1	-B	-A	1	A	B	/A	/B	-/B	-/A	-1	-B				
$\chi_{17}^{(54)}$	A	/B	1	/A	B	1	B	/A	/B	A	-A	-/B	-1	-/A	-B	1	B	/A	/B	A	-A	-/B	-1	-/A				
$\chi_{17}^{(55)}$	/A	B	1	A	/B	1	/B	A	B	/A	-/A	-B	-1	-A	-/B	1	/B	A	B	/A	-/A	-B	-1	-A				
$\chi_{17}^{(56)}$	B	A	1	/B	/A	1	/A	/B	A	B	-B	-A	-1	-/B	-/A	1	/A	/B	A	B	-B	-A	-1	-/B				
$\chi_{17}^{(57)}$	/B	/A	1	B	A	1	A	B	/A	/B	-/B	-/A	-1	-B	-A	-1	-A	-B	-/A	-/B	/B	/A	1	B				
$\chi_{17}^{(58)}$	A	/B	1	/A	B	1	B	/A	/B	A	-A	-/B	-1	-/A	-B	-1	-B	-/A	-/B	-A	A	/B	1	/A				
$\chi_{17}^{(59)}$	/A	B	1	A	/B	1	/B	A	B	/A	-/A	-B	-1	-A	-/B	-1	-/B	-A	-B	-/A	/A	B	1	A				
$\chi_{17}^{(60)}$	B	A	1	/B	/A	1	/A	/B	A	B	-B	-A	-1	-/B	-/A	-1	-/A	-/B	-A	-B	B	A	1	/B				
$\chi_{17}^{(61)}$	.	.	.	.	.	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	.	.	.	.	.	.	.	.	.	.
$\chi_{17}^{(62)}$	.	.	.	.	.	-2	-2	-2	-2	-2	2	2	2	2	2	.	.	.	.	.	.	.	.	.	.
$\chi_{17}^{(63)}$	.	.	.	.	.	-2	I	J	/I	/J	/J	/I	-2	J	I	.	.	.	.	.	.	.	.	.	.
$\chi_{17}^{(64)}$	.	.	.	.	.	-2	J	/I	/J	I	I	/J	-2	/I	J	.	.	.	.	.	.	.	.	.	.
$\chi_{17}^{(65)}$	.	.	.	.	.	-2	/J	I	J	/I	/I	J	-2	I	/J	.	.	.	.	.	.	.	.	.	.
$\chi_{17}^{(66)}$	.	.	.	.	.	-2	/I	/J	I	J	J	I	-2	/J	/I	.	.	.	.	.	.	.	.	.	.
$\chi_{17}^{(67)}$	.	.	.	.	.	-2	I	J	/I	/J	-/J	-/I	2	-J	-I	.	.	.	.	.	.	.	.	.	.
$\chi_{17}^{(68)}$	.	.	.	.	.	-2	J	/I	/J	I	-I	-/J	2	-/I	-J	.	.	.	.	.	.	.	.	.	.
$\chi_{17}^{(69)}$	.	.	.	.	.	-2	/J	I	J	/I	-/I	-J	2	-I	-/J	.	.	.	.	.	.	.	.	.	.
$\chi_{17}^{(70)}$	.	.	.	.	.	-2	/I	/J	I	J	-J	-I	2	-/J	-/I	.	.	.	.	.	.	.	.	.	.

	50	60										70									
$\chi_{17}^{(46)}$	B	-1	-B	-/A	-/B	-A	-A	-/B	-1	-/A	-B	.	.	.	.	.	.	.	.	.	.
$\chi_{17}^{(47)}$	/B	-1	-/B	-A	-B	-/A	-/A	-B	-1	-A	-/B	.	.	.	.	.	.	.	.	.	.
$\chi_{17}^{(48)}$	/A	-1	-/A	-/B	-A	-B	-B	-A	-1	-/B	-/A	.	.	.	.	.	.	.	.	.	.
$\chi_{17}^{(49)}$	-A	1	A	B	/A	/B	/B	/A	1	B	A	.	.	.	.	.	.	.	.	.	.
$\chi_{17}^{(50)}$	-B	1	B	/A	/B	A	A	/B	1	/A	B	.	.	.	.	.	.	.	.	.	.
$\chi_{17}^{(51)}$	-/B	1	/B	A	B	/A	/A	B	1	A	/B	.	.	.	.	.	.	.	.	.	.
$\chi_{17}^{(52)}$	-/A	1	/A	/B	A	B	B	A	1	/B	/A	.	.	.	.	.	.	.	.	.	.
$\chi_{17}^{(53)}$	-A	-1	-A	-B	-/A	-/B	/B	/A	1	B	A	.	.	.	.	.	.	.	.	.	.
$\chi_{17}^{(54)}$	-B	-1	-B	-/A	-/B	-A	A	/B	1	/A	B	.	.	.	.	.	.	.	.	.	.
$\chi_{17}^{(55)}$	-/B	-1	-/B	-A	-B	-/A	/A	B	1	A	/B	.	.	.	.	.	.	.	.	.	.
$\chi_{17}^{(56)}$	-/A	-1	-/A	-/B	-A	-B	B	A	1	/B	/A	.	.	.	.	.	.	.	.	.	.
$\chi_{17}^{(57)}$	A	1	A	B	/A	/B	-/B	-/A	-1	-B	-A	.	.	.	.	.	.	.	.	.	.
$\chi_{17}^{(58)}$	B	1	B	/A	/B	A	-A	-/B	-1	-/A	-B	.	.	.	.	.	.	.	.	.	.
$\chi_{17}^{(59)}$	/B	1	/B	A	B	/A	-/A	-B	-1	-A	-/B	.	.	.	.	.	.	.	.	.	.
$\chi_{17}^{(60)}$	/A	1	/A	/B	A	B	-B	-A	-1	-/B	-/A	.	.	.	.	.	.	.	.	.	.
$\chi_{17}^{(61)}$	.	.	.	.	.	.	.	.	.	.	.	1	1	1	1	1	1	1	1	1	1
$\chi_{17}^{(62)}$	.	.	.	.	.	.	.	.	.	.	.	1	1	1	1	1	-1	-1	-1	-1	-1
$\chi_{17}^{(63)}$	.	.	.	.	.	.	.	.	.	.	.	1	A	B	/A	/B	/B	/A	1	B	A
$\chi_{17}^{(64)}$	.	.	.	.	.	.	.	.	.	.	.	1	B	/A	/B	A	A	/B	1	/A	B
$\chi_{17}^{(65)}$	.	.	.	.	.	.	.	.	.	.	.	1	/B	A	B	/A	/A	B	1	A	/B
$\chi_{17}^{(66)}$	.	.	.	.	.	.	.	.	.	.	.	1	/A	/B	A	B	B	A	1	/B	/A
$\chi_{17}^{(67)}$	.	.	.	.	.	.	.	.	.	.	.	1	A	B	/A	/B	-/B	-/A	-1	-B	-A
$\chi_{17}^{(68)}$	.	.	.	.	.	.	.	.	.	.	.	1	B	/A	/B	A	-A	-/B	-1	-/A	-B
$\chi_{17}^{(69)}$	.	.	.	.	.	.	.	.	.	.	.	1	/B	A	B	/A	-/A	-B	-1	-A	-/B
$\chi_{17}^{(70)}$	.	.	.	.	.	.	.	.	.	.	.	1	/A	/B	A	B	-B	-A	-1	-/B	-/A

where $A = E(5)^4, B = E(5)^3, C = 4 * E(5)^4, D = 4 * E(5)^3, E = 5 * E(5)^4, F = 5 * E(5)^3, G = 6 * E(5)^4, H = 6 * E(5)^3, I$

$= -2 * E(5)^4, J = -2 * E(5)^3$.

The generators of $G^{s_{18}}$ are:

$$\begin{pmatrix} 0 & -1 & 0 & 0 & 0 & 0 & 0 & 1 \\ 0 & -1 & 1 & -1 & 0 & 1 & -1 & 1 \\ 1 & -1 & 0 & -1 & 0 & 1 & -1 & 2 \\ 1 & -1 & 1 & -2 & 0 & 1 & -1 & 2 \\ 1 & -1 & 1 & -1 & -1 & 1 & -1 & 2 \\ 1 & -1 & 1 & -1 & 0 & 0 & -1 & 2 \\ 1 & -1 & 0 & 0 & 0 & 0 & -1 & 1 \\ 1 & -1 & 0 & 0 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 & -1 & 1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 0 & 0 & 1 & 0 & 0 & 0 \\ -1 & 0 & 0 & 0 & 1 & 0 & 0 & 0 \\ -1 & -1 & 1 & 0 & 1 & 0 & 0 & 0 \\ -1 & -1 & 0 & 1 & 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix},$$

$$\begin{pmatrix} 1 & 0 & 1 & -1 & 1 & -1 & 0 & 0 \\ 0 & 1 & 2 & -2 & 2 & -2 & 0 & 0 \\ 0 & 0 & 3 & -2 & 2 & -2 & 0 & 0 \\ 0 & 0 & 4 & -3 & 4 & -4 & 0 & 0 \\ 0 & 0 & 3 & -3 & 4 & -3 & 0 & 0 \\ 0 & 0 & 2 & -2 & 3 & -2 & -1 & 1 \\ 0 & 0 & 1 & -1 & 2 & -2 & 0 & 1 \\ 0 & 0 & 1 & -1 & 1 & -1 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 1 & -1 & 1 & -1 & -1 & 1 \\ 0 & 1 & 2 & -2 & 2 & -2 & -1 & 1 \\ 0 & 0 & 3 & -2 & 2 & -2 & -2 & 2 \\ 0 & 0 & 4 & -3 & 4 & -4 & -2 & 2 \\ 0 & 0 & 3 & -3 & 4 & -3 & -2 & 2 \\ 0 & 0 & 2 & -2 & 3 & -2 & -2 & 2 \\ 0 & 0 & 1 & -1 & 2 & -2 & -1 & 2 \\ 0 & 0 & 1 & -1 & 1 & -1 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 1 & 1 & 0 & -1 & 1 & -1 & 0 & 1 \\ 0 & 2 & 1 & -2 & 2 & -2 & 0 & 1 \\ 0 & 2 & 1 & -2 & 2 & -2 & 0 & 2 \\ 0 & 3 & 1 & -3 & 4 & -4 & 0 & 3 \\ 0 & 2 & 1 & -3 & 4 & -3 & 0 & 2 \\ 0 & 1 & 1 & -2 & 3 & -2 & -1 & 2 \\ 0 & 0 & 1 & -1 & 2 & -2 & 0 & 1 \\ 0 & 0 & 1 & -1 & 1 & -1 & 0 & 1 \end{pmatrix}.$$

The representatives of conjugacy classes of $G^{s_{18}}$ are:

$$\begin{aligned}
 & \begin{pmatrix} 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & -1 & 1 & 0 & -1 & 1 & -1 \\ 1 & 0 & -1 & 1 & 0 & -1 & 1 & 0 \\ 1 & -1 & -1 & 2 & 0 & -2 & 2 & -1 \\ 1 & -1 & -2 & 3 & 0 & -2 & 2 & -1 \\ 1 & -1 & -2 & 2 & 1 & -2 & 2 & -1 \\ 1 & -1 & -2 & 2 & 0 & -1 & 2 & -1 \\ 0 & 0 & -1 & 1 & 0 & -1 & 2 & -1 \\ 0 & 0 & -1 & 1 & 0 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 0 & 0 & 0 & 0 & 0 & -1 \\ 0 & 1 & -1 & 1 & 0 & -1 & 1 & -1 \\ -1 & 1 & 0 & 1 & 0 & -1 & 1 & -2 \\ -1 & 1 & -1 & 2 & 0 & -1 & 1 & -2 \\ -1 & 1 & -1 & 1 & 1 & -1 & 1 & -2 \\ -1 & 1 & -1 & 1 & 0 & 0 & 1 & -2 \\ -1 & 1 & 0 & 0 & 0 & 0 & 1 & -1 \\ -1 & 1 & 0 & 0 & 0 & 0 & 0 & 0 \end{pmatrix}, \\
& \begin{pmatrix} 0 & -1 & 0 & 0 & 0 & 0 & 0 & 1 \\ 0 & -1 & 1 & -1 & 0 & 1 & -1 & 1 \\ 1 & -1 & 0 & -1 & 0 & 1 & -1 & 2 \\ 1 & -1 & 1 & -2 & 0 & 1 & -1 & 2 \\ 1 & -1 & 1 & -1 & -1 & 1 & -1 & 2 \\ 1 & -1 & 1 & -1 & 0 & 0 & -1 & 2 \\ 1 & -1 & 0 & 0 & 0 & 0 & -1 & 1 \\ 1 & -1 & 0 & 0 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & -1 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & -1 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & -1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & -1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & -1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & -1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 1 & -1 & 0 & 1 & -1 & 1 \\ -1 & 0 & 1 & -1 & 0 & 1 & -1 & 0 \\ -1 & 1 & 1 & -2 & 0 & 2 & -2 & 1 \\ -1 & 1 & 2 & -3 & 0 & 2 & -2 & 1 \\ -1 & 1 & 2 & -2 & -1 & 2 & -2 & 1 \\ -1 & 1 & 2 & -2 & 0 & 1 & -2 & 1 \\ 0 & 0 & 1 & -1 & 0 & 1 & -2 & 1 \\ 0 & 0 & 1 & -1 & 0 & 1 & -1 & 0 \end{pmatrix}, \\
& \begin{pmatrix} -1 & 1 & -1 & 0 & 1 & -1 & 0 & 1 \\ -1 & 1 & -1 & 0 & 1 & -2 & 1 & 2 \\ -2 & 1 & -1 & 0 & 2 & -3 & 1 & 2 \\ -3 & 2 & -1 & 0 & 2 & -4 & 1 & 4 \\ -2 & 2 & -1 & 0 & 2 & -4 & 1 & 3 \\ -2 & 1 & -1 & 1 & 1 & -3 & 1 & 2 \\ -2 & 1 & 0 & 0 & 1 & -2 & 1 & 1 \\ -1 & 1 & 0 & 0 & 0 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 1 & 0 & -1 & 1 & 0 & -1 & 2 \\ -2 & 2 & 0 & -1 & 1 & -1 & 0 & 2 \\ -3 & 2 & 1 & -2 & 2 & -1 & -1 & 3 \\ -4 & 3 & 1 & -2 & 2 & -2 & -1 & 5 \\ -3 & 3 & 1 & -2 & 2 & -2 & -1 & 4 \\ -3 & 2 & 1 & -1 & 1 & -1 & -1 & 3 \\ -2 & 1 & 1 & -1 & 1 & -1 & 0 & 2 \\ -1 & 1 & 1 & -1 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & -1 & 0 & 1 & -1 & 0 & 2 \\ -1 & 1 & 0 & -1 & 1 & -1 & 0 & 3 \\ -1 & 0 & 0 & -1 & 2 & -2 & 0 & 4 \\ -2 & 1 & 0 & -1 & 2 & -3 & 0 & 6 \\ -1 & 1 & 0 & -1 & 2 & -3 & 0 & 5 \\ -1 & 0 & 0 & 0 & 1 & -2 & 0 & 4 \\ -1 & 0 & 0 & 0 & 1 & -2 & 1 & 2 \\ 0 & 0 & 0 & 0 & 0 & -1 & 1 & 1 \end{pmatrix}, \\
& \begin{pmatrix} 0 & 0 & 1 & 0 & -1 & 1 & 0 & -2 \\ 1 & -1 & 0 & 1 & -1 & 1 & 0 & -3 \\ 1 & 0 & 0 & 1 & -2 & 2 & 0 & -4 \\ 2 & -1 & 0 & 1 & -2 & 3 & 0 & -6 \\ 1 & -1 & 0 & 1 & -2 & 3 & 0 & -5 \\ 1 & 0 & 0 & 0 & -1 & 2 & 0 & -4 \\ 1 & 0 & 0 & 0 & -1 & 2 & -1 & -2 \\ 0 & 0 & 0 & 0 & 0 & 1 & -1 & -1 \end{pmatrix}, \begin{pmatrix} 1 & -1 & 1 & 0 & -1 & 1 & 0 & -1 \\ 1 & -1 & 1 & 0 & -1 & 2 & -1 & -2 \\ 2 & -1 & 1 & 0 & -2 & 3 & -1 & -2 \\ 3 & -2 & 1 & 0 & -2 & 4 & -1 & -4 \\ 2 & -2 & 1 & 0 & -2 & 4 & -1 & -3 \\ 2 & -1 & 1 & -1 & -1 & 3 & -1 & -2 \\ 2 & -1 & 0 & 0 & -1 & 2 & -1 & -1 \\ 1 & -1 & 0 & 0 & 0 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & -1 & 0 & 1 & -1 & 0 & 1 & -2 \\ 2 & -2 & 0 & 1 & -1 & 1 & 0 & -2 \\ 3 & -2 & -1 & 2 & -2 & 1 & 1 & -3 \\ 4 & -3 & -1 & 2 & -2 & 2 & 1 & -5 \\ 3 & -3 & -1 & 2 & -2 & 2 & 1 & -4 \\ 3 & -2 & -1 & 1 & -1 & 1 & 1 & -3 \\ 2 & -1 & -1 & 1 & -1 & 1 & 0 & -2 \\ 1 & -1 & -1 & 1 & 0 & 0 & 0 & -1 \end{pmatrix}, \\
& \begin{pmatrix} 1 & 1 & 1 & -1 & -1 & 0 & 1 & 0 \\ 0 & 2 & 2 & -2 & -1 & 0 & 2 & -1 \\ 1 & 2 & 3 & -3 & -1 & 0 & 2 & -1 \\ 1 & 3 & 4 & -4 & -2 & 0 & 4 & -2 \\ 1 & 3 & 3 & -4 & -1 & 0 & 3 & -1 \\ 0 & 2 & 3 & -3 & -1 & 0 & 2 & 0 \\ 0 & 1 & 2 & -2 & 0 & -1 & 2 & 0 \\ 0 & 0 & 1 & -1 & 0 & 0 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 1 & 0 & 0 & -1 & -1 & 2 & -1 \\ 1 & 1 & 1 & -1 & -1 & -1 & 3 & -1 \\ 2 & 1 & 1 & -1 & -1 & -2 & 4 & -2 \\ 2 & 2 & 2 & -2 & -2 & -2 & 6 & -3 \\ 2 & 2 & 1 & -2 & -1 & -2 & 5 & -2 \\ 1 & 1 & 1 & -1 & -1 & -2 & 4 & -1 \\ 0 & 1 & 1 & -1 & 0 & -2 & 3 & -1 \\ 0 & 0 & 0 & 0 & 0 & -1 & 2 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 2 & 1 & -1 & -1 & 0 & 1 & -1 \\ 0 & 2 & 1 & -1 & -1 & -1 & 3 & -2 \\ 0 & 3 & 2 & -2 & -1 & -1 & 3 & -3 \\ 0 & 4 & 3 & -3 & -2 & -1 & 5 & -4 \\ 0 & 4 & 2 & -3 & -1 & -1 & 4 & -3 \\ -1 & 3 & 2 & -2 & -1 & -1 & 3 & -2 \\ -1 & 2 & 2 & -2 & 0 & -1 & 2 & -1 \\ -1 & 1 & 1 & -1 & 0 & 0 & 1 & -1 \end{pmatrix},
\end{aligned}$$

$$\begin{pmatrix} 0 & 2 & 0 & 0 & -1 & 0 & 0 & 0 \\ 0 & 2 & -1 & 1 & -1 & -1 & 1 & 0 \\ 0 & 3 & -1 & 1 & -2 & 0 & 1 & -1 \\ 0 & 4 & -2 & 2 & -3 & 0 & 1 & 0 \\ 0 & 3 & -2 & 2 & -2 & 0 & 0 & 0 \\ 0 & 3 & -2 & 1 & -1 & 0 & 0 & 0 \\ 0 & 2 & -1 & 0 & 0 & 0 & 0 & 0 \\ -1 & 1 & 0 & 0 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 1 & 0 & 0 & -1 & 0 & 0 & 1 \\ 0 & 2 & 0 & 0 & -1 & 0 & 0 & 1 \\ 1 & 2 & 0 & 0 & -2 & 1 & 0 & 1 \\ 1 & 3 & -1 & 1 & -3 & 1 & 0 & 2 \\ 1 & 2 & -1 & 1 & -2 & 1 & -1 & 2 \\ 1 & 2 & -1 & 0 & -1 & 1 & -1 & 2 \\ 1 & 1 & -1 & 0 & 0 & 0 & 0 & 1 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 1 & 1 & -1 & 1 & -1 & -1 & 1 & 0 \\ 1 & 1 & -1 & 1 & -1 & -1 & 1 & 1 \\ 2 & 1 & -2 & 2 & -2 & -1 & 2 & 0 \\ 2 & 2 & -3 & 3 & -3 & -1 & 2 & 1 \\ 2 & 1 & -3 & 3 & -2 & -1 & 1 & 1 \\ 2 & 1 & -3 & 2 & -1 & -1 & 1 & 1 \\ 1 & 1 & -2 & 1 & 0 & -1 & 1 & 0 \\ 0 & 0 & -1 & 1 & 0 & -1 & 1 & 0 \end{pmatrix}, \\
\begin{pmatrix} 0 & -1 & -1 & 1 & 0 & 1 & -1 & -1 \\ 1 & -2 & -1 & 1 & 0 & 1 & -1 & -1 \\ 0 & -3 & -1 & 2 & 0 & 1 & -1 & -2 \\ 1 & -4 & -1 & 2 & 0 & 2 & -2 & -3 \\ 1 & -3 & -1 & 1 & 1 & 1 & -1 & -3 \\ 1 & -2 & -1 & 1 & 0 & 1 & 0 & -3 \\ 0 & -1 & 0 & 0 & 0 & 1 & 0 & -2 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 0 & 0 & 0 & 2 & -2 & 0 \\ 0 & -1 & 0 & 0 & 0 & 2 & -2 & -1 \\ -1 & -2 & 1 & 0 & 0 & 3 & -3 & -1 \\ 0 & -3 & 1 & 0 & 0 & 4 & -4 & -2 \\ 0 & -2 & 1 & -1 & 1 & 3 & -3 & -2 \\ 0 & -1 & 1 & -1 & 0 & 3 & -2 & -2 \\ 0 & -1 & 1 & -1 & 0 & 2 & -1 & -1 \\ 0 & 0 & 1 & -1 & 0 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & -2 & -1 & 1 & 0 & 1 & -1 & 0 \\ 1 & -2 & 0 & 0 & 0 & 2 & -2 & 0 \\ 1 & -4 & 0 & 1 & 0 & 2 & -2 & 0 \\ 2 & -5 & 0 & 1 & 0 & 3 & -3 & -1 \\ 2 & -4 & 0 & 0 & 1 & 2 & -2 & -1 \\ 2 & -3 & 0 & 0 & 0 & 2 & -1 & -1 \\ 1 & -2 & 0 & 0 & 0 & 1 & 0 & -1 \\ 1 & -1 & 0 & 0 & 0 & 0 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} -1 & 2 & 1 & -1 & 0 & -1 & 1 & 0 \\ -1 & 2 & 0 & 0 & 0 & -2 & 2 & 0 \\ -1 & 4 & 0 & -1 & 0 & -2 & 2 & 0 \\ -2 & 5 & 0 & -1 & 0 & -3 & 3 & 1 \\ -2 & 4 & 0 & 0 & -1 & -2 & 2 & 1 \\ -2 & 3 & 0 & 0 & 0 & -2 & 1 & 1 \\ -1 & 2 & 0 & 0 & 0 & -1 & 0 & 1 \\ -1 & 1 & 0 & 0 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 1 & -1 & 0 & -1 & 1 & 1 \\ -1 & 2 & 1 & -1 & 0 & -1 & 1 & 1 \\ 0 & 3 & 1 & -2 & 0 & -1 & 1 & 2 \\ -1 & 4 & 1 & -2 & 0 & -2 & 2 & 3 \\ -1 & 3 & 1 & -1 & -1 & -1 & 1 & 3 \\ -1 & 2 & 1 & -1 & 0 & -1 & 0 & 3 \\ 0 & 1 & 0 & 0 & 0 & -1 & 0 & 2 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 0 & 0 & 0 & -2 & 2 & 0 \\ 0 & 1 & 0 & 0 & 0 & -2 & 2 & 1 \\ 1 & 2 & -1 & 0 & 0 & -3 & 3 & 1 \\ 0 & 3 & -1 & 0 & 0 & -4 & 4 & 2 \\ 0 & 2 & -1 & 1 & -1 & -3 & 3 & 2 \\ 0 & 1 & -1 & 1 & 0 & -3 & 2 & 2 \\ 0 & 1 & -1 & 1 & 0 & -2 & 1 & 1 \\ 0 & 0 & -1 & 1 & 0 & -1 & 1 & 0 \end{pmatrix}, \\
\begin{pmatrix} -1 & 0 & 1 & 0 & -1 & 0 & 2 & -2 \\ 0 & 0 & 1 & 0 & -2 & 0 & 3 & -2 \\ -1 & 0 & 1 & 1 & -3 & 0 & 4 & -3 \\ -1 & 0 & 2 & 1 & -5 & 1 & 5 & -4 \\ -1 & 0 & 2 & 1 & -4 & 0 & 4 & -3 \\ -1 & 0 & 1 & 1 & -3 & 0 & 3 & -2 \\ -1 & 1 & 1 & 0 & -2 & 0 & 2 & -1 \\ 0 & 1 & 0 & 0 & -1 & 0 & 1 & -1 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 2 & -1 & -1 & 1 & 1 & -1 \\ -1 & 1 & 2 & -1 & -2 & 1 & 2 & -2 \\ -2 & 1 & 3 & -1 & -3 & 2 & 2 & -2 \\ -2 & 1 & 4 & -1 & -5 & 3 & 3 & -3 \\ -2 & 1 & 4 & -1 & -4 & 2 & 2 & -2 \\ -2 & 1 & 3 & -1 & -3 & 2 & 1 & -1 \\ -1 & 1 & 2 & -1 & -2 & 1 & 1 & 0 \\ 0 & 1 & 1 & -1 & -1 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 1 & 0 & -1 & 0 & 2 & -1 \\ 0 & 0 & 2 & -1 & -2 & 1 & 2 & -1 \\ 0 & -1 & 2 & 0 & -3 & 1 & 3 & -1 \\ 0 & -1 & 3 & 0 & -5 & 2 & 4 & -2 \\ 0 & -1 & 3 & 0 & -4 & 1 & 3 & -1 \\ 0 & -1 & 2 & 0 & -3 & 1 & 2 & 0 \\ 0 & 0 & 1 & 0 & -2 & 0 & 2 & 0 \\ 1 & 0 & 0 & 0 & -1 & 0 & 1 & 0 \end{pmatrix}, \\
\begin{pmatrix} 0 & 1 & -1 & 0 & 1 & 0 & -2 & 1 \\ 0 & 0 & -2 & 1 & 2 & -1 & -2 & 1 \\ 0 & 1 & -2 & 0 & 3 & -1 & -3 & 1 \\ 0 & 1 & -3 & 0 & 5 & -2 & -4 & 2 \\ 0 & 1 & -3 & 0 & 4 & -1 & -3 & 1 \\ 0 & 1 & -2 & 0 & 3 & -1 & -2 & 0 \\ 0 & 0 & -1 & 0 & 2 & 0 & -2 & 0 \\ -1 & 0 & 0 & 0 & 1 & 0 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & -1 & 0 & 1 & 0 & -2 & 2 \\ 0 & 0 & -1 & 0 & 2 & 0 & -3 & 2 \\ 1 & 0 & -1 & -1 & 3 & 0 & -4 & 3 \\ 1 & 0 & -2 & -1 & 5 & -1 & -5 & 4 \\ 1 & 0 & -2 & -1 & 4 & 0 & -4 & 3 \\ 1 & 0 & -1 & -1 & 3 & 0 & -3 & 2 \\ 1 & -1 & -1 & 0 & 2 & 0 & -2 & 1 \\ 0 & -1 & 0 & 0 & 1 & 0 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & -2 & 1 & 1 & -1 & -1 & 1 \\ 1 & -1 & -2 & 1 & 2 & -1 & -2 & 2 \\ 2 & -1 & -3 & 1 & 3 & -2 & -2 & 2 \\ 2 & -1 & -4 & 1 & 5 & -3 & -3 & 3 \\ 2 & -1 & -4 & 1 & 4 & -2 & -2 & 2 \\ 2 & -1 & -3 & 1 & 3 & -2 & -1 & 1 \\ 1 & -1 & -2 & 1 & 2 & -1 & -1 & 0 \\ 0 & -1 & -1 & 1 & 1 & -1 & 0 & 0 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} -1 & 0 & 0 & 0 & 0 & 0 & 0 & 2 \\ -2 & 1 & 0 & -1 & 1 & 0 & 0 & 2 \\ -2 & 1 & 0 & -1 & 0 & 1 & 0 & 3 \\ -3 & 1 & -1 & -1 & 1 & 1 & 0 & 4 \\ -2 & 1 & -1 & -1 & 1 & 1 & 0 & 3 \\ -1 & 1 & -1 & -1 & 1 & 1 & -1 & 3 \\ 0 & 1 & -1 & -1 & 1 & 0 & 0 & 2 \\ 0 & 0 & 0 & -1 & 1 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} -1 & 0 & -1 & 1 & 0 & -1 & 1 & 1 \\ -1 & 0 & -1 & 0 & 1 & -1 & 1 & 2 \\ -1 & 0 & -2 & 1 & 0 & -1 & 2 & 2 \\ -2 & 0 & -3 & 1 & 1 & -1 & 2 & 3 \\ -1 & 0 & -3 & 1 & 1 & -1 & 2 & 2 \\ 0 & 0 & -3 & 1 & 1 & -1 & 1 & 2 \\ 0 & 1 & -2 & 0 & 1 & -1 & 1 & 1 \\ 0 & 0 & -1 & 0 & 1 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} -2 & 1 & 0 & 0 & 0 & 0 & 0 & 1 \\ -2 & 1 & -1 & 0 & 1 & -1 & 1 & 1 \\ -3 & 2 & -1 & 0 & 0 & 0 & 1 & 1 \\ -4 & 2 & -2 & 0 & 1 & 0 & 1 & 2 \\ -3 & 2 & -2 & 0 & 1 & 0 & 1 & 1 \\ -2 & 2 & -2 & 0 & 1 & 0 & 0 & 1 \\ -1 & 2 & -1 & -1 & 1 & 0 & 0 & 1 \\ -1 & 1 & 0 & -1 & 1 & 0 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 2 & -1 & 0 & 0 & 0 & 0 & 0 & -1 \\ 2 & -1 & 1 & 0 & -1 & 1 & -1 & -1 \\ 3 & -2 & 1 & 0 & 0 & 0 & -1 & -1 \\ 4 & -2 & 2 & 0 & -1 & 0 & -1 & -2 \\ 3 & -2 & 2 & 0 & -1 & 0 & -1 & -1 \\ 2 & -2 & 2 & 0 & -1 & 0 & 0 & -1 \\ 1 & -2 & 1 & 1 & -1 & 0 & 0 & -1 \\ 1 & -1 & 0 & 1 & -1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 0 & 0 & 0 & 0 & 0 & -2 \\ 2 & -1 & 0 & 1 & -1 & 0 & 0 & -2 \\ 2 & -1 & 0 & 1 & 0 & -1 & 0 & -3 \\ 3 & -1 & 1 & 1 & -1 & -1 & 0 & -4 \\ 2 & -1 & 1 & 1 & -1 & -1 & 0 & -3 \\ 1 & -1 & 1 & 1 & -1 & -1 & 1 & -3 \\ 0 & -1 & 1 & 1 & -1 & 0 & 0 & -2 \\ 0 & 0 & 0 & 1 & -1 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 1 & -1 & 0 & 1 & -1 & -1 \\ 1 & 0 & 1 & 0 & -1 & 1 & -1 & -2 \\ 1 & 0 & 2 & -1 & 0 & 1 & -2 & -2 \\ 2 & 0 & 3 & -1 & -1 & 1 & -2 & -3 \\ 1 & 0 & 3 & -1 & -1 & 1 & -2 & -2 \\ 0 & 0 & 3 & -1 & -1 & 1 & -1 & -2 \\ 0 & -1 & 2 & 0 & -1 & 1 & -1 & -1 \\ 0 & 0 & 1 & 0 & -1 & 1 & -1 & 0 \end{pmatrix}, \\
\begin{pmatrix} 1 & 2 & -1 & 0 & -1 & 0 & 0 & 0 \\ 2 & 2 & -1 & 0 & -1 & -1 & 0 & 1 \\ 2 & 3 & -2 & 0 & -1 & -1 & 0 & 1 \\ 3 & 4 & -2 & 0 & -2 & -1 & -1 & 2 \\ 2 & 3 & -1 & 0 & -2 & -1 & 0 & 1 \\ 2 & 2 & -1 & 0 & -1 & -1 & 0 & 0 \\ 1 & 2 & 0 & -1 & 0 & -1 & 0 & 0 \\ 0 & 1 & 0 & 0 & 0 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 2 & 0 & -1 & -1 & 1 & -1 & 1 \\ 1 & 3 & 0 & -1 & -1 & 0 & -1 & 1 \\ 1 & 4 & 0 & -2 & -1 & 1 & -2 & 2 \\ 2 & 5 & 0 & -2 & -2 & 1 & -3 & 3 \\ 1 & 4 & 1 & -2 & -2 & 1 & -2 & 2 \\ 1 & 3 & 1 & -2 & -1 & 1 & -2 & 1 \\ 1 & 2 & 1 & -2 & 0 & 0 & -1 & 1 \\ 0 & 1 & 1 & -1 & 0 & 0 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 2 & 1 & -1 & 0 & -1 & 0 & 0 & 1 \\ 2 & 2 & 0 & -1 & -1 & 0 & -1 & 2 \\ 3 & 2 & -1 & -1 & -1 & 0 & -1 & 3 \\ 4 & 3 & -1 & -1 & -2 & 0 & -2 & 4 \\ 3 & 2 & 0 & -1 & -2 & 0 & -1 & 3 \\ 3 & 1 & 0 & -1 & -1 & 0 & -1 & 2 \\ 2 & 1 & 0 & -1 & 0 & -1 & 0 & 1 \\ 1 & 0 & 0 & 0 & 0 & -1 & 0 & 1 \end{pmatrix}, \\
\begin{pmatrix} -2 & -1 & 1 & 0 & 1 & 0 & 0 & -1 \\ -2 & -2 & 0 & 1 & 1 & 0 & 1 & -2 \\ -3 & -2 & 1 & 1 & 1 & 0 & 1 & -3 \\ -4 & -3 & 1 & 1 & 2 & 0 & 2 & -4 \\ -3 & -2 & 0 & 1 & 2 & 0 & 1 & -3 \\ -3 & -1 & 0 & 1 & 1 & 0 & 1 & -2 \\ -2 & -1 & 0 & 1 & 0 & 1 & 0 & -1 \\ -1 & 0 & 0 & 0 & 0 & 1 & 0 & -1 \end{pmatrix}, \begin{pmatrix} -1 & -2 & 1 & 0 & 1 & 0 & 0 & 0 \\ -2 & -2 & 1 & 0 & 1 & 1 & 0 & -1 \\ -2 & -3 & 2 & 0 & 1 & 1 & 0 & -1 \\ -3 & -4 & 2 & 0 & 2 & 1 & 1 & -2 \\ -2 & -3 & 1 & 0 & 2 & 1 & 0 & -1 \\ -2 & -2 & 1 & 0 & 1 & 1 & 0 & 0 \\ -1 & -2 & 0 & 1 & 0 & 1 & 0 & 0 \\ 0 & -1 & 0 & 0 & 0 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & -2 & 0 & 1 & 1 & -1 & 1 & -1 \\ -1 & -3 & 0 & 1 & 1 & 0 & 1 & -1 \\ -1 & -4 & 0 & 2 & 1 & -1 & 2 & -2 \\ -2 & -5 & 0 & 2 & 2 & -1 & 3 & -3 \\ -1 & -4 & -1 & 2 & 2 & -1 & 2 & -2 \\ -1 & -3 & -1 & 2 & 1 & -1 & 2 & -1 \\ -1 & -2 & -1 & 2 & 0 & 0 & 1 & -1 \\ 0 & -1 & -1 & 1 & 0 & 0 & 1 & -1 \end{pmatrix}, \\
\begin{pmatrix} 0 & 0 & 1 & 0 & -1 & 0 & 1 & 0 \\ -1 & 1 & 2 & -1 & -1 & 0 & 2 & -1 \\ -1 & 0 & 3 & -1 & -1 & 0 & 2 & -1 \\ -2 & 0 & 4 & -1 & -2 & 0 & 4 & -2 \\ -2 & 0 & 3 & -1 & -1 & 0 & 3 & -1 \\ -2 & 0 & 3 & -1 & -1 & 0 & 2 & 0 \\ -1 & 0 & 2 & -1 & 0 & -1 & 2 & 0 \\ 0 & 0 & 1 & -1 & 0 & 0 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 0 & 1 & -1 & -1 & 2 & -1 \\ 0 & 0 & 1 & 0 & -1 & -1 & 3 & -1 \\ 0 & -1 & 1 & 1 & -1 & -2 & 4 & -2 \\ -1 & -1 & 2 & 1 & -2 & -2 & 6 & -3 \\ -1 & -1 & 1 & 1 & -1 & -2 & 5 & -2 \\ -1 & -1 & 1 & 1 & -1 & -2 & 4 & -1 \\ -1 & 0 & 1 & 0 & 0 & -2 & 3 & -1 \\ 0 & 0 & 0 & 0 & 0 & -1 & 2 & -1 \end{pmatrix}, \begin{pmatrix} -1 & 1 & 1 & 0 & -1 & 0 & 1 & -1 \\ -1 & 1 & 1 & 0 & -1 & -1 & 3 & -2 \\ -2 & 1 & 2 & 0 & -1 & -1 & 3 & -3 \\ -3 & 1 & 3 & 0 & -2 & -1 & 5 & -4 \\ -3 & 1 & 2 & 0 & -1 & -1 & 4 & -3 \\ -3 & 1 & 2 & 0 & -1 & -1 & 3 & -2 \\ -2 & 1 & 2 & -1 & 0 & -1 & 2 & -1 \\ -1 & 1 & 1 & -1 & 0 & 0 & 1 & -1 \end{pmatrix},
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$$\begin{pmatrix} 1 & -1 & -1 & 0 & 1 & 0 & -1 & 1 \\ 1 & -1 & -1 & 0 & 1 & 1 & -3 & 2 \\ 2 & -1 & -2 & 0 & 1 & 1 & -3 & 3 \\ 3 & -1 & -3 & 0 & 2 & 1 & -5 & 4 \\ 3 & -1 & -2 & 0 & 1 & 1 & -4 & 3 \\ 3 & -1 & -2 & 0 & 1 & 1 & -3 & 2 \\ 2 & -1 & -2 & 1 & 0 & 1 & -2 & 1 \\ 1 & -1 & -1 & 1 & 0 & 0 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & -1 & 0 & 1 & 0 & -1 & 0 \\ 1 & -1 & -2 & 1 & 1 & 0 & -2 & 1 \\ 1 & 0 & -3 & 1 & 1 & 0 & -2 & 1 \\ 2 & 0 & -4 & 1 & 2 & 0 & -4 & 2 \\ 2 & 0 & -3 & 1 & 1 & 0 & -3 & 1 \\ 2 & 0 & -3 & 1 & 1 & 0 & -2 & 0 \\ 1 & 0 & -2 & 1 & 0 & 1 & -2 & 0 \\ 0 & 0 & -1 & 1 & 0 & 0 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 0 & -1 & 1 & 1 & -2 & 1 \\ 0 & 0 & -1 & 0 & 1 & 1 & -3 & 1 \\ 0 & 1 & -1 & -1 & 1 & 2 & -4 & 2 \\ 1 & 1 & -2 & -1 & 2 & 2 & -6 & 3 \\ 1 & 1 & -1 & -1 & 1 & 2 & -5 & 2 \\ 1 & 1 & -1 & -1 & 1 & 2 & -4 & 1 \\ 1 & 0 & -1 & 0 & 0 & 2 & -3 & 1 \\ 0 & 0 & 0 & 0 & 0 & 1 & -2 & 1 \end{pmatrix}, \\
\begin{pmatrix} 0 & 0 & -2 & 1 & 0 & 1 & -1 & 0 \\ 1 & -1 & -3 & 2 & -1 & 2 & -1 & 0 \\ 1 & 0 & -4 & 2 & -1 & 2 & -1 & 0 \\ 2 & 0 & -6 & 3 & -2 & 4 & -2 & 0 \\ 2 & 0 & -5 & 3 & -2 & 3 & -2 & 0 \\ 1 & 0 & -4 & 3 & -2 & 2 & -1 & 0 \\ 0 & 0 & -2 & 2 & -2 & 2 & -1 & 0 \\ 0 & 0 & -1 & 1 & -1 & 1 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & -1 & 0 & 0 & 2 & -2 & 1 \\ 0 & 0 & -2 & 1 & -1 & 3 & -2 & 0 \\ 0 & 1 & -2 & 0 & -1 & 4 & -3 & 1 \\ 1 & 1 & -4 & 1 & -2 & 6 & -4 & 1 \\ 1 & 1 & -3 & 1 & -2 & 5 & -4 & 1 \\ 0 & 1 & -2 & 1 & -2 & 4 & -3 & 1 \\ 0 & 0 & -1 & 1 & -2 & 3 & -2 & 1 \\ 0 & 0 & 0 & 0 & -1 & 2 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & -1 & -2 & 1 & 0 & 1 & -1 & 1 \\ 1 & -1 & -2 & 1 & -1 & 3 & -2 & 1 \\ 2 & -1 & -3 & 1 & -1 & 3 & -2 & 2 \\ 3 & -1 & -5 & 2 & -2 & 5 & -3 & 2 \\ 3 & -1 & -4 & 2 & -2 & 4 & -3 & 2 \\ 2 & -1 & -3 & 2 & -2 & 3 & -2 & 2 \\ 1 & -1 & -2 & 2 & -2 & 2 & -1 & 1 \\ 1 & -1 & -1 & 1 & -1 & 1 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} -1 & 1 & 2 & -1 & 0 & -1 & 1 & -1 \\ -1 & 1 & 2 & -1 & 1 & -3 & 2 & -1 \\ -2 & 1 & 3 & -1 & 1 & -3 & 2 & -2 \\ -3 & 1 & 5 & -2 & 2 & -5 & 3 & -2 \\ -3 & 1 & 4 & -2 & 2 & -4 & 3 & -2 \\ -2 & 1 & 3 & -2 & 2 & -3 & 2 & -2 \\ -1 & 1 & 2 & -2 & 2 & -2 & 1 & -1 \\ -1 & 1 & 1 & -1 & 1 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 2 & -1 & 0 & -1 & 1 & 0 \\ -1 & 1 & 3 & -2 & 1 & -2 & 1 & 0 \\ -1 & 0 & 4 & -2 & 1 & -2 & 1 & 0 \\ -2 & 0 & 6 & -3 & 2 & -4 & 2 & 0 \\ -2 & 0 & 5 & -3 & 2 & -3 & 2 & 0 \\ -1 & 0 & 4 & -3 & 2 & -2 & 1 & 0 \\ 0 & 0 & 2 & -2 & 2 & -2 & 1 & 0 \\ 0 & 0 & 1 & -1 & 1 & -1 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 1 & 0 & 0 & -2 & 2 & -1 \\ 0 & 0 & 2 & -1 & 1 & -3 & 2 & 0 \\ 0 & -1 & 2 & 0 & 1 & -4 & 3 & -1 \\ -1 & -1 & 4 & -1 & 2 & -6 & 4 & -1 \\ -1 & -1 & 3 & -1 & 2 & -5 & 4 & -1 \\ 0 & -1 & 2 & -1 & 2 & -4 & 3 & -1 \\ 0 & 0 & 1 & -1 & 2 & -3 & 2 & -1 \\ 0 & 0 & 0 & 0 & 1 & -2 & 1 & 0 \end{pmatrix}, \\
\begin{pmatrix} 1 & 2 & -1 & -1 & 1 & -1 & 0 & 0 \\ 2 & 2 & -2 & -1 & 2 & -2 & 0 & 1 \\ 2 & 3 & -3 & -1 & 2 & -2 & 0 & 1 \\ 3 & 4 & -4 & -2 & 4 & -3 & -1 & 2 \\ 2 & 3 & -3 & -2 & 4 & -3 & 0 & 1 \\ 2 & 2 & -3 & -1 & 3 & -2 & 0 & 0 \\ 1 & 2 & -2 & -1 & 2 & -1 & 0 & 0 \\ 0 & 1 & -1 & 0 & 1 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 2 & 0 & -2 & 1 & 0 & -1 & 1 \\ 1 & 3 & -1 & -2 & 2 & -1 & -1 & 1 \\ 1 & 4 & -1 & -3 & 2 & 0 & -2 & 2 \\ 2 & 5 & -2 & -4 & 4 & -1 & -3 & 3 \\ 1 & 4 & -1 & -4 & 4 & -1 & -2 & 2 \\ 1 & 3 & -1 & -3 & 3 & 0 & -2 & 1 \\ 1 & 2 & -1 & -2 & 2 & 0 & -1 & 1 \\ 0 & 1 & 0 & -1 & 1 & 0 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 2 & 1 & -1 & -1 & 1 & -1 & 0 & 1 \\ 2 & 2 & -1 & -2 & 2 & -1 & -1 & 2 \\ 3 & 2 & -2 & -2 & 2 & -1 & -1 & 3 \\ 4 & 3 & -3 & -3 & 4 & -2 & -2 & 4 \\ 3 & 2 & -2 & -3 & 4 & -2 & -1 & 3 \\ 3 & 1 & -2 & -2 & 3 & -1 & -1 & 2 \\ 2 & 1 & -2 & -1 & 2 & -1 & 0 & 1 \\ 1 & 0 & -1 & 0 & 1 & -1 & 0 & 1 \end{pmatrix}, \\
\begin{pmatrix} -2 & -1 & 1 & 1 & -1 & 1 & 0 & -1 \\ -2 & -2 & 1 & 2 & -2 & 1 & 1 & -2 \\ -3 & -2 & 2 & 2 & -2 & 1 & 1 & -3 \\ -4 & -3 & 3 & 3 & -4 & 2 & 2 & -4 \\ -3 & -2 & 2 & 3 & -4 & 2 & 1 & -3 \\ -3 & -1 & 2 & 2 & -3 & 1 & 1 & -2 \\ -2 & -1 & 2 & 1 & -2 & 1 & 0 & -1 \\ -1 & 0 & 1 & 0 & -1 & 1 & 0 & -1 \end{pmatrix}, \begin{pmatrix} -1 & -2 & 1 & 1 & -1 & 1 & 0 & 0 \\ -2 & -2 & 2 & 1 & -2 & 2 & 0 & -1 \\ -2 & -3 & 3 & 1 & -2 & 2 & 0 & -1 \\ -3 & -4 & 4 & 2 & -4 & 3 & 1 & -2 \\ -2 & -3 & 3 & 2 & -4 & 3 & 0 & -1 \\ -2 & -2 & 3 & 1 & -3 & 2 & 0 & 0 \\ -1 & -2 & 2 & 1 & -2 & 1 & 0 & 0 \\ 0 & -1 & 1 & 0 & -1 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & -2 & 0 & 2 & -1 & 0 & 1 & -1 \\ -1 & -3 & 1 & 2 & -2 & 1 & 1 & -1 \\ -1 & -4 & 1 & 3 & -2 & 0 & 2 & -2 \\ -2 & -5 & 2 & 4 & -4 & 1 & 3 & -3 \\ -1 & -4 & 1 & 4 & -4 & 1 & 2 & -2 \\ -1 & -3 & 1 & 3 & -3 & 0 & 2 & -1 \\ -1 & -2 & 1 & 2 & -2 & 0 & 1 & -1 \\ 0 & -1 & 0 & 1 & -1 & 0 & 1 & -1 \end{pmatrix},
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$$\begin{pmatrix} 1 & 1 & -1 & 1 & -1 & 0 & -1 & 0 \\ 2 & 0 & -1 & 2 & -2 & 0 & -1 & 0 \\ 2 & 1 & -2 & 3 & -3 & 0 & -1 & 0 \\ 3 & 1 & -2 & 4 & -4 & 0 & -2 & 0 \\ 2 & 0 & -2 & 4 & -3 & 0 & -2 & 0 \\ 1 & 0 & -1 & 3 & -2 & -1 & -1 & 0 \\ 0 & 0 & 0 & 2 & -2 & 0 & -1 & 0 \\ 0 & 0 & 0 & 1 & -1 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 1 & 1 & 0 & 0 & -1 & 1 & -2 & 1 \\ 1 & 1 & 0 & 1 & -2 & 1 & -2 & 0 \\ 1 & 2 & 0 & 1 & -3 & 2 & -3 & 1 \\ 2 & 2 & 0 & 2 & -4 & 2 & -4 & 1 \\ 1 & 1 & 0 & 2 & -3 & 2 & -4 & 1 \\ 0 & 1 & 1 & 1 & -2 & 1 & -3 & 1 \\ 0 & 0 & 1 & 1 & -2 & 1 & -2 & 1 \\ 0 & 0 & 1 & 0 & -1 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 2 & 0 & -1 & 1 & -1 & 0 & -1 & 1 \\ 2 & 0 & 0 & 1 & -2 & 1 & -2 & 1 \\ 3 & 0 & -1 & 2 & -3 & 1 & -2 & 2 \\ 4 & 0 & -1 & 3 & -4 & 1 & -3 & 2 \\ 3 & -1 & -1 & 3 & -3 & 1 & -3 & 2 \\ 2 & -1 & 0 & 2 & -2 & 0 & -2 & 2 \\ 1 & -1 & 0 & 2 & -2 & 0 & -1 & 1 \\ 1 & -1 & 0 & 1 & -1 & 0 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} -2 & 0 & 1 & -1 & 1 & 0 & 1 & -1 \\ -2 & 0 & 0 & -1 & 2 & -1 & 2 & -1 \\ -3 & 0 & 1 & -2 & 3 & -1 & 2 & -2 \\ -4 & 0 & 1 & -3 & 4 & -1 & 3 & -2 \\ -3 & 1 & 1 & -3 & 3 & -1 & 3 & -2 \\ -2 & 1 & 0 & -2 & 2 & 0 & 2 & -2 \\ -1 & 1 & 0 & -2 & 2 & 0 & 1 & -1 \\ -1 & 1 & 0 & -1 & 1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 1 & -1 & 1 & 0 & 1 & 0 \\ -2 & 0 & 1 & -2 & 2 & 0 & 1 & 0 \\ -2 & -1 & 2 & -3 & 3 & 0 & 1 & 0 \\ -3 & -1 & 2 & -4 & 4 & 0 & 2 & 0 \\ -2 & 0 & 2 & -4 & 3 & 0 & 2 & 0 \\ -1 & 0 & 1 & -3 & 2 & 1 & 1 & 0 \\ 0 & 0 & 0 & -2 & 2 & 0 & 1 & 0 \\ 0 & 0 & 0 & -1 & 1 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 0 & 0 & 1 & -1 & 2 & -1 \\ -1 & -1 & 0 & -1 & 2 & -1 & 2 & 0 \\ -1 & -2 & 0 & -1 & 3 & -2 & 3 & -1 \\ -2 & -2 & 0 & -2 & 4 & -2 & 4 & -1 \\ -1 & -1 & 0 & -2 & 3 & -2 & 4 & -1 \\ 0 & -1 & -1 & -1 & 2 & -1 & 3 & -1 \\ 0 & 0 & -1 & -1 & 2 & -1 & 2 & -1 \\ 0 & 0 & -1 & 0 & 1 & -1 & 1 & 0 \end{pmatrix}, \\
\begin{pmatrix} 2 & 1 & 0 & -2 & 1 & 0 & 0 & 0 \\ 2 & 3 & 0 & -3 & 1 & 0 & 0 & 0 \\ 3 & 3 & 1 & -4 & 1 & 0 & 0 & 0 \\ 5 & 5 & 0 & -5 & 1 & 0 & 0 & 0 \\ 4 & 4 & 0 & -4 & 1 & 0 & 0 & 0 \\ 3 & 3 & 0 & -3 & 0 & 1 & 0 & 0 \\ 2 & 2 & 0 & -2 & 0 & 0 & 1 & 0 \\ 1 & 1 & 0 & -1 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 2 & 1 & -1 & -1 & 1 & -1 & 1 & -1 \\ 3 & 2 & -1 & -2 & 1 & -1 & 1 & 0 \\ 4 & 2 & -1 & -2 & 1 & -2 & 2 & -1 \\ 6 & 4 & -2 & -3 & 1 & -2 & 2 & -1 \\ 5 & 3 & -2 & -2 & 1 & -2 & 2 & -1 \\ 4 & 2 & -2 & -1 & 0 & -1 & 2 & -1 \\ 2 & 2 & -1 & -1 & 0 & -1 & 2 & -1 \\ 1 & 1 & -1 & 0 & 0 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 2 & 0 & -2 & 1 & 0 & 0 & -1 \\ 2 & 3 & -1 & -2 & 1 & -1 & 1 & -1 \\ 2 & 4 & 0 & -3 & 1 & -1 & 1 & -2 \\ 4 & 6 & -1 & -4 & 1 & -1 & 1 & -2 \\ 3 & 5 & -1 & -3 & 1 & -1 & 1 & -2 \\ 2 & 4 & -1 & -2 & 0 & 0 & 1 & -2 \\ 1 & 3 & 0 & -2 & 0 & 0 & 1 & -1 \\ 0 & 2 & 0 & -1 & 0 & 0 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} -1 & -2 & 0 & 2 & -1 & 0 & 0 & 1 \\ -2 & -3 & 1 & 2 & -1 & 1 & -1 & 1 \\ -2 & -4 & 0 & 3 & -1 & 1 & -1 & 2 \\ -4 & -6 & 1 & 4 & -1 & 1 & -1 & 2 \\ -3 & -5 & 1 & 3 & -1 & 1 & -1 & 2 \\ -2 & -4 & 1 & 2 & 0 & 0 & -1 & 2 \\ -1 & -3 & 0 & 2 & 0 & 0 & -1 & 1 \\ 0 & -2 & 0 & 1 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -2 & -1 & 0 & 2 & -1 & 0 & 0 & 0 \\ -2 & -3 & 0 & 3 & -1 & 0 & 0 & 0 \\ -3 & -3 & -1 & 4 & -1 & 0 & 0 & 0 \\ -5 & -5 & 0 & 5 & -1 & 0 & 0 & 0 \\ -4 & -4 & 0 & 4 & -1 & 0 & 0 & 0 \\ -3 & -3 & 0 & 3 & 0 & -1 & 0 & 0 \\ -2 & -2 & 0 & 2 & 0 & 0 & -1 & 0 \\ -1 & -1 & 0 & 1 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} -2 & -1 & 1 & 1 & -1 & 1 & -1 & 1 \\ -3 & -2 & 1 & 2 & -1 & 1 & -1 & 0 \\ -4 & -2 & 1 & 2 & -1 & 2 & -2 & 1 \\ -6 & -4 & 2 & 3 & -1 & 2 & -2 & 1 \\ -5 & -3 & 2 & 2 & -1 & 2 & -2 & 1 \\ -4 & -2 & 2 & 1 & 0 & 1 & -2 & 1 \\ -2 & -2 & 1 & 1 & 0 & 1 & -2 & 1 \\ -1 & -1 & 1 & 0 & 0 & 1 & -1 & 0 \end{pmatrix}, \\
\begin{pmatrix} 1 & 0 & -1 & 0 & -1 & 2 & 0 & 0 \\ 1 & 1 & -2 & 0 & -1 & 3 & -1 & 0 \\ 1 & 1 & -2 & 0 & -2 & 4 & -1 & 1 \\ 2 & 1 & -4 & 1 & -3 & 6 & -2 & 1 \\ 1 & 0 & -3 & 1 & -2 & 5 & -2 & 1 \\ 1 & 0 & -2 & 0 & -1 & 4 & -2 & 1 \\ 1 & 0 & -2 & 0 & 0 & 2 & -1 & 1 \\ 1 & 0 & -1 & 0 & 0 & 1 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & -2 & 1 & -1 & 1 & 1 & -1 \\ 2 & 0 & -3 & 1 & -1 & 2 & 0 & 0 \\ 2 & 0 & -4 & 2 & -2 & 2 & 1 & 0 \\ 3 & 0 & -6 & 3 & -3 & 4 & 0 & 0 \\ 2 & -1 & -5 & 3 & -2 & 3 & 0 & 0 \\ 2 & -1 & -4 & 2 & -1 & 2 & 0 & 0 \\ 1 & 0 & -3 & 1 & 0 & 1 & 0 & 0 \\ 1 & 0 & -2 & 1 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 1 & -1 & 0 & -1 & 2 & 0 & -1 \\ 1 & 1 & -3 & 1 & -1 & 2 & 0 & -1 \\ 0 & 2 & -3 & 1 & -2 & 3 & 0 & -1 \\ 1 & 2 & -5 & 2 & -3 & 5 & -1 & -1 \\ 0 & 1 & -4 & 2 & -2 & 4 & -1 & -1 \\ 0 & 1 & -3 & 1 & -1 & 3 & -1 & -1 \\ 0 & 1 & -2 & 0 & 0 & 2 & -1 & 0 \\ 0 & 1 & -1 & 0 & 0 & 1 & -1 & 0 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} 1 & 0 & 1 & -2 & 2 & -1 & 0 & 0 \\ 0 & 0 & 2 & -3 & 3 & -1 & 0 & -1 \\ 0 & 0 & 3 & -4 & 4 & -2 & 0 & 0 \\ 0 & 0 & 4 & -6 & 6 & -3 & 1 & -1 \\ 0 & 0 & 3 & -5 & 5 & -2 & 1 & -1 \\ 0 & 0 & 3 & -4 & 3 & -1 & 1 & -1 \\ 0 & -1 & 2 & -2 & 2 & -1 & 1 & -1 \\ 0 & -1 & 1 & -1 & 1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 0 & -1 & 2 & -2 & 1 & -1 \\ 1 & -1 & 1 & -2 & 3 & -2 & 1 & -1 \\ 1 & -1 & 1 & -2 & 4 & -4 & 2 & -1 \\ 1 & -1 & 2 & -4 & 6 & -5 & 3 & -2 \\ 1 & -1 & 1 & -3 & 5 & -4 & 3 & -2 \\ 1 & -1 & 1 & -2 & 3 & -3 & 3 & -2 \\ 0 & -1 & 1 & -1 & 2 & -2 & 2 & -2 \\ 0 & -1 & 0 & 0 & 1 & -1 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 1 & -2 & 2 & -1 & 0 & -1 \\ 0 & 0 & 1 & -2 & 3 & -2 & 1 & -2 \\ -1 & 1 & 2 & -3 & 4 & -3 & 1 & -2 \\ -1 & 1 & 3 & -5 & 6 & -4 & 2 & -3 \\ -1 & 1 & 2 & -4 & 5 & -3 & 2 & -3 \\ -1 & 1 & 2 & -3 & 3 & -2 & 2 & -3 \\ -1 & 0 & 2 & -2 & 2 & -1 & 1 & -2 \\ -1 & 0 & 1 & -1 & 1 & 0 & 0 & -1 \end{pmatrix}, \\
\begin{pmatrix} 0 & -1 & -1 & 2 & -2 & 1 & 0 & 1 \\ 0 & 0 & -1 & 2 & -3 & 2 & -1 & 2 \\ 1 & -1 & -2 & 3 & -4 & 3 & -1 & 2 \\ 1 & -1 & -3 & 5 & -6 & 4 & -2 & 3 \\ 1 & -1 & -2 & 4 & -5 & 3 & -2 & 3 \\ 1 & -1 & -2 & 3 & -3 & 2 & -2 & 3 \\ 1 & 0 & -2 & 2 & -2 & 1 & -1 & 2 \\ 1 & 0 & -1 & 1 & -1 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} -1 & 0 & -1 & 2 & -2 & 1 & 0 & 0 \\ 0 & 0 & -2 & 3 & -3 & 1 & 0 & 1 \\ 0 & 0 & -3 & 4 & -4 & 2 & 0 & 0 \\ 0 & 0 & -4 & 6 & -6 & 3 & -1 & 1 \\ 0 & 0 & -3 & 5 & -5 & 2 & -1 & 1 \\ 0 & 0 & -3 & 4 & -3 & 1 & -1 & 1 \\ 0 & 1 & -2 & 2 & -2 & 1 & -1 & 1 \\ 0 & 1 & -1 & 1 & -1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 0 & 1 & -2 & 2 & -1 & 1 \\ -1 & 1 & -1 & 2 & -3 & 2 & -1 & 1 \\ -1 & 1 & -1 & 2 & -4 & 4 & -2 & 1 \\ -1 & 1 & -2 & 4 & -6 & 5 & -3 & 2 \\ -1 & 1 & -1 & 3 & -5 & 4 & -3 & 2 \\ -1 & 1 & -1 & 2 & -3 & 3 & -3 & 2 \\ 0 & 1 & -1 & 1 & -2 & 2 & -2 & 2 \\ 0 & 1 & 0 & 0 & -1 & 1 & -1 & 1 \end{pmatrix}, \\
\begin{pmatrix} -1 & 0 & -1 & 1 & 1 & -1 & 0 & 0 \\ -1 & -1 & -2 & 2 & 1 & -1 & 0 & 1 \\ -2 & -1 & -2 & 2 & 2 & -2 & 1 & 0 \\ -3 & -2 & -3 & 3 & 3 & -2 & 0 & 1 \\ -2 & -2 & -3 & 3 & 2 & -1 & 0 & 0 \\ -2 & -2 & -2 & 3 & 1 & -1 & 0 & 0 \\ -2 & -1 & -1 & 2 & 0 & 0 & 0 & 0 \\ -1 & 0 & -1 & 1 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 0 & 0 & 1 & 0 & -1 & 1 \\ -2 & 0 & -1 & 1 & 1 & 0 & -1 & 1 \\ -3 & 0 & 0 & 0 & 2 & 0 & -1 & 1 \\ -4 & -1 & -1 & 1 & 3 & 0 & -2 & 2 \\ -3 & -1 & -1 & 1 & 2 & 1 & -2 & 1 \\ -3 & -1 & 0 & 1 & 1 & 1 & -2 & 1 \\ -2 & -1 & 0 & 1 & 0 & 1 & -1 & 1 \\ -1 & 0 & 0 & 0 & 0 & 1 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 0 & -1 & -1 & 1 & 1 & -1 & 0 & 1 \\ -1 & -1 & -1 & 1 & 1 & 0 & -1 & 2 \\ -1 & -2 & -1 & 1 & 2 & -1 & 0 & 2 \\ -2 & -3 & -2 & 2 & 3 & -1 & -1 & 3 \\ -1 & -3 & -2 & 2 & 2 & 0 & -1 & 2 \\ -1 & -3 & -1 & 2 & 1 & 0 & -1 & 2 \\ -1 & -2 & -1 & 2 & 0 & 0 & 0 & 1 \\ 0 & -1 & -1 & 1 & 0 & 0 & 0 & 1 \end{pmatrix}, \\
\begin{pmatrix} 0 & 1 & 1 & -1 & -1 & 1 & 0 & -1 \\ 1 & 1 & 1 & -1 & -1 & 0 & 1 & -2 \\ 1 & 2 & 1 & -1 & -2 & 1 & 0 & -2 \\ 2 & 3 & 2 & -2 & -3 & 1 & 1 & -3 \\ 1 & 3 & 2 & -2 & -2 & 0 & 1 & -2 \\ 1 & 3 & 1 & -2 & -1 & 0 & 1 & -2 \\ 1 & 2 & 1 & -2 & 0 & 0 & 0 & -1 \\ 0 & 1 & 1 & -1 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 1 & -1 & -1 & 1 & 0 & 0 \\ 1 & 1 & 2 & -2 & -1 & 1 & 0 & -1 \\ 2 & 1 & 2 & -2 & -2 & 2 & -1 & 0 \\ 3 & 2 & 3 & -3 & -3 & 2 & 0 & -1 \\ 2 & 2 & 3 & -3 & -2 & 1 & 0 & 0 \\ 2 & 2 & 2 & -3 & -1 & 1 & 0 & 0 \\ 2 & 1 & 1 & -2 & 0 & 0 & 0 & 0 \\ 1 & 0 & 1 & -1 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 0 & 0 & -1 & 0 & 1 & -1 \\ 2 & 0 & 1 & -1 & -1 & 0 & 1 & -1 \\ 3 & 0 & 0 & 0 & -2 & 0 & 1 & -1 \\ 4 & 1 & 1 & -1 & -3 & 0 & 2 & -2 \\ 3 & 1 & 1 & -1 & -2 & -1 & 2 & -1 \\ 3 & 1 & 0 & -1 & -1 & -1 & 2 & -1 \\ 2 & 1 & 0 & -1 & 0 & -1 & 1 & -1 \\ 1 & 0 & 0 & 0 & 0 & -1 & 1 & -1 \end{pmatrix}, \\
\begin{pmatrix} 1 & -1 & 1 & 0 & -1 & 1 & 0 & -1 \\ 1 & 0 & 2 & -1 & -1 & 1 & 0 & -2 \\ 1 & -1 & 3 & -1 & -1 & 1 & 0 & -2 \\ 2 & -1 & 4 & -1 & -2 & 1 & 0 & -3 \\ 1 & -1 & 4 & -1 & -2 & 1 & 0 & -2 \\ 1 & -1 & 3 & -1 & -1 & 1 & -1 & -1 \\ 1 & -1 & 2 & -1 & 0 & 0 & 0 & -1 \\ 1 & 0 & 1 & -1 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & -1 & 0 & 1 & -1 & 0 & 1 & -2 \\ 2 & -1 & 1 & 0 & -1 & 0 & 1 & -2 \\ 2 & -2 & 1 & 1 & -1 & -1 & 2 & -3 \\ 3 & -2 & 2 & 1 & -2 & -1 & 2 & -4 \\ 2 & -2 & 2 & 1 & -2 & -1 & 2 & -3 \\ 2 & -2 & 1 & 1 & -1 & -1 & 1 & -2 \\ 1 & -1 & 1 & 0 & 0 & -1 & 1 & -2 \\ 1 & 0 & 0 & 0 & 0 & -1 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 1 & 0 & -1 & 1 & 0 & -2 \\ 1 & 0 & 1 & 0 & -1 & 0 & 1 & -3 \\ 0 & 0 & 2 & 0 & -1 & 0 & 1 & -4 \\ 1 & 0 & 3 & 0 & -2 & 0 & 1 & -5 \\ 0 & 0 & 3 & 0 & -2 & 0 & 1 & -4 \\ 0 & 0 & 2 & 0 & -1 & 0 & 0 & -3 \\ 0 & 0 & 2 & -1 & 0 & 0 & 0 & -2 \\ 0 & 1 & 1 & -1 & 0 & 0 & 0 & -1 \end{pmatrix},
\end{pmatrix}$$

The character table of $G^{s_{18}}$:

	10										20														
$\chi_{18}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
$\chi_{18}^{(2)}$	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1	1
$\chi_{18}^{(3)}$	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	1
$\chi_{18}^{(4)}$	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	1
$\chi_{18}^{(5)}$	1	A	/A	-/A	-1	-A	-/A	-1	-A	A	/A	1	/A	1	A	-A	-/A	-1	-/A	-1	-A	A	/A	1	1
$\chi_{18}^{(6)}$	1	/A	A	-A	-1	-/A	-A	-1	-/A	/A	A	1	A	1	/A	-/A	-A	-1	-A	-1	-/A	/A	A	1	1
$\chi_{18}^{(7)}$	1	A	/A	-/A	-1	-A	/A	1	A	-A	-/A	-1	/A	1	A	-A	-/A	-1	/A	1	A	-A	-/A	-1	1
$\chi_{18}^{(8)}$	1	/A	A	-A	-1	-/A	A	1	/A	-/A	-A	-1	A	1	/A	-/A	-A	-1	A	1	/A	-/A	-A	-1	1
$\chi_{18}^{(9)}$	1	A	/A	/A	1	A	-/A	-1	-A	-A	-/A	-1	/A	1	A	A	/A	1	-/A	-1	-A	-A	-/A	-1	1
$\chi_{18}^{(10)}$	1	/A	A	A	1	/A	-A	-1	-/A	-/A	-A	-1	A	1	/A	/A	A	1	-A	-1	-/A	-/A	-A	-1	1
$\chi_{18}^{(11)}$	1	A	/A	/A	1	A	/A	1	A	A	/A	1	/A	1	A	A	/A	1	/A	1	A	A	/A	1	1
$\chi_{18}^{(12)}$	1	/A	A	A	1	/A	A	1	/A	/A	A	1	A	1	/A	/A	A	1	A	1	/A	/A	A	1	1
$\chi_{18}^{(13)}$	6	6	6	6	6	6	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(14)}$	6	6	6	6	6	6	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(15)}$	6	6	6	-6	-6	-6	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(16)}$	6	6	6	-6	-6	-6	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(17)}$	6	B	/B	/B	6	B	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(18)}$	6	/B	B	B	6	/B	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(19)}$	6	B	/B	/B	6	B	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(20)}$	6	/B	B	B	6	/B	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(21)}$	6	B	/B	-/B	-6	-B	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(22)}$	6	/B	B	-B	-6	-/B	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(23)}$	6	B	/B	-/B	-6	-B	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(24)}$	6	/B	B	-B	-6	-/B	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(25)}$	10	10	10	10	10	10	.	.	.	.	.	.	4	4	4	4	4	4	.	.	.	.	.	-2
$\chi_{18}^{(26)}$	10	10	10	-10	-10	-10	.	.	.	.	.	.	4	4	4	-4	-4	-4	.	.	.	.	.	-2
$\chi_{18}^{(27)}$	10	C	/C	/C	10	C	.	.	.	.	.	.	M	4	/M	/M	M	4	.	.	.	.	.	-2
$\chi_{18}^{(28)}$	10	/C	C	C	10	/C	.	.	.	.	.	.	/M	4	M	M	/M	4	.	.	.	.	.	-2
$\chi_{18}^{(29)}$	10	C	/C	-/C	-10	-C	.	.	.	.	.	.	M	4	/M	-/M	-M	-4	.	.	.	.	.	-2
$\chi_{18}^{(30)}$	10	/C	C	-C	-10	-/C	.	.	.	.	.	.	/M	4	M	-M	-/M	-4	.	.	.	.	.	-2
$\chi_{18}^{(31)}$	15	15	15	15	15	15	.	.	.	.	.	.	.	.	.	.	.	3	3	3	3	3	3	-1
$\chi_{18}^{(32)}$	15	15	15	15	15	15	-1	-1	-1	-1	-1	-1	3	3	3	3	3	3	-1	-1	-1	-1	-1	1	
$\chi_{18}^{(33)}$	15	15	15	15	15	15	.	.	.	.	.	.	.	.	.	.	.	-3	-3	-3	-3	-3	-3	-1
$\chi_{18}^{(34)}$	15	15	15	15	15	15	1	1	1	1	1	1	3	3	3	3	3	3	1	1	1	1	1	1	
$\chi_{18}^{(35)}$	15	15	15	-15	-15	-15	.	.	.	.	.	.	.	.	.	.	.	3	3	3	-3	-3	-3	-1
$\chi_{18}^{(36)}$	15	15	15	-15	-15	-15	-1	-1	-1	1	1	1	3	3	3	-3	-3	-3	-1	-1	-1	1	1	1	
$\chi_{18}^{(37)}$	15	15	15	-15	-15	-15	.	.	.	.	.	.	.	.	.	.	.	-3	-3	-3	3	3	3	-1
$\chi_{18}^{(38)}$	15	15	15	-15	-15	-15	1	1	1	-1	-1	-1	3	3	3	-3	-3	-3	1	1	1	-1	-1	1	
$\chi_{18}^{(39)}$	15	D	/D	/D	15	D	.	.	.	.	.	.	.	.	.	.	.	N	3	/N	/N	N	3	-1
$\chi_{18}^{(40)}$	15	/D	D	D	15	/D	.	.	.	.	.	.	.	.	.	.	.	/N	3	N	N	/N	3	-1
$\chi_{18}^{(41)}$	15	D	/D	/D	15	D	-/A	-1	-A	-A	-/A	-1	N	3	/N	/N	N	3	-/A	-1	-A	-A	-/A	1	
$\chi_{18}^{(42)}$	15	/D	D	D	15	/D	-A	-1	-/A	-/A	-A	-1	/N	3	N	N	/N	3	-A	-1	-/A	-/A	-A	1	
$\chi_{18}^{(43)}$	15	D	/D	/D	15	D	-N	-3	-/N	-/N	-N	-3	-1	
$\chi_{18}^{(44)}$	15	/D	D	D	15	/D	-/N	-3	-N	-N	-/N	-3	-1	
$\chi_{18}^{(45)}$	15	D	/D	/D	15	D	/A	1	A	A	/A	1	N	3	/N	/N	N	3	/A	1	A	A	/A	1	

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$\chi_{18}^{(46)}$	15	/D	D	D	15	/D	A	1	/A	/A	A	1	/N	3	N	N	/N	3	A	1	/A	/A	A	1	1
$\chi_{18}^{(47)}$	15	D	/D	-/D	-15	-D	N	3	/N	-/N	-N	-3	-1
$\chi_{18}^{(48)}$	15	/D	D	-D	-15	-/D	/N	3	N	-N	-/N	-3	-1	
$\chi_{18}^{(49)}$	15	D	/D	-/D	-15	-D	-/A	-1	-A	A	/A	1	N	3	/N	-/N	-N	-3	-/A	-1	-A	A	/A	1	1
$\chi_{18}^{(50)}$	15	/D	D	-D	-15	-/D	-A	-1	-/A	/A	A	1	/N	3	N	-N	-/N	-3	-A	-1	-/A	/A	A	1	1
$\chi_{18}^{(51)}$	15	D	/D	-/D	-15	-D	.	.	.	.	.	.	.	.	.	.	.	.	-N	-3	-/N	/N	N	3	-1
$\chi_{18}^{(52)}$	15	/D	D	-D	-15	-/D	.	.	.	.	.	.	.	.	.	.	.	.	-/N	-3	-N	N	/N	3	-1
$\chi_{18}^{(53)}$	15	D	/D	-/D	-15	-D	/A	1	A	-A	-/A	-1	N	3	/N	-/N	-N	-3	/A	1	A	-A	-/A	-1	1
$\chi_{18}^{(54)}$	15	/D	D	-D	-15	-/D	A	1	/A	-/A	-A	-1	/N	3	N	-N	-/N	-3	A	1	/A	-/A	-A	-1	1
$\chi_{18}^{(55)}$	20	20	20	20	20	20	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-2	-2	-2	-2	-2	-2	.
$\chi_{18}^{(56)}$	20	20	20	20	20	20	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	2	2	2	2	2	2	.
$\chi_{18}^{(57)}$	20	20	20	-20	-20	-20	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1	-2	-2	-2	2	2	2	.
$\chi_{18}^{(58)}$	20	20	20	-20	-20	-20	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	2	2	2	-2	-2	-2	.
$\chi_{18}^{(59)}$	20	20	20	20	20	20	.	.	.	.	.	.	2	2	2	2	2	2	.	.	.	.	.	.	.
$\chi_{18}^{(60)}$	20	20	20	-20	-20	-20	.	.	.	.	.	.	2	2	2	-2	-2	-2	.	.	.	.	.	.	.
$\chi_{18}^{(61)}$	20	E	/E	/E	20	E	/A	1	A	A	/A	1	-/A	-1	-A	-A	-/A	-1	-O	-2	-/O	-/O	-O	-2	.
$\chi_{18}^{(62)}$	20	/E	E	E	20	/E	A	1	/A	/A	A	1	-A	-1	-/A	-/A	-A	-1	-/O	-2	-O	-O	-/O	-2	.
$\chi_{18}^{(63)}$	20	E	/E	/E	20	E	-/A	-1	-A	-A	-/A	-1	-/A	-1	-A	-A	-/A	-1	O	2	/O	/O	O	2	.
$\chi_{18}^{(64)}$	20	/E	E	E	20	/E	-A	-1	-/A	-/A	-A	-1	-A	-1	-/A	-/A	-A	-1	/O	2	O	O	/O	2	.
$\chi_{18}^{(65)}$	20	E	/E	-/E	-20	-E	/A	1	A	-A	-/A	-1	-/A	-1	-A	A	/A	1	-O	-2	-/O	/O	O	2	.
$\chi_{18}^{(66)}$	20	/E	E	-E	-20	-/E	A	1	/A	-/A	-A	-1	-A	-1	-/A	/A	A	1	-/O	-2	-O	O	/O	2	.
$\chi_{18}^{(67)}$	20	E	/E	-/E	-20	-E	-/A	-1	-A	A	/A	1	-/A	-1	-A	A	/A	1	O	2	/O	-/O	-O	-2	.
$\chi_{18}^{(68)}$	20	/E	E	-E	-20	-/E	-A	-1	-/A	/A	A	1	-A	-1	-/A	/A	A	1	/O	2	O	-O	-/O	-2	.
$\chi_{18}^{(69)}$	20	E	/E	/E	20	E	.	.	.	.	.	.	O	2	/O	/O	O	2	.	.	.	.	.	.	.
$\chi_{18}^{(70)}$	20	/E	E	E	20	/E	.	.	.	.	.	.	/O	2	O	O	/O	2	.	.	.	.	.	.	.
$\chi_{18}^{(71)}$	20	E	/E	-/E	-20	-E	.	.	.	.	.	.	O	2	/O	-/O	-O	-2	.	.	.	.	.	.	.
$\chi_{18}^{(72)}$	20	/E	E	-E	-20	-/E	.	.	.	.	.	.	/O	2	O	-O	-/O	-2	.	.	.	.	.	.	.
$\chi_{18}^{(73)}$	24	24	24	24	24	24	-1	-1	-1	-1	-1	-1	3	3	3	3	3	3	-4	-4	-4	-4	-4	-4	.
$\chi_{18}^{(74)}$	24	24	24	24	24	24	1	1	1	1	1	1	3	3	3	3	3	3	4	4	4	4	4	4	.
$\chi_{18}^{(75)}$	24	24	24	-24	-24	-24	-1	-1	-1	1	1	1	3	3	3	-3	-3	-3	-4	-4	-4	4	4	4	.
$\chi_{18}^{(76)}$	24	24	24	-24	-24	-24	1	1	1	-1	-1	-1	3	3	3	-3	-3	-3	4	4	4	-4	-4	-4	.
$\chi_{18}^{(77)}$	24	F	/F	/F	24	F	-/A	-1	-A	-A	-/A	-1	N	3	/N	/N	N	3	-M	-4	-/M	-/M	-M	-4	.
$\chi_{18}^{(78)}$	24	/F	F	F	24	/F	-A	-1	-/A	-/A	-A	-1	/N	3	N	N	/N	3	-/M	-4	-M	-M	-/M	-4	.
$\chi_{18}^{(79)}$	24	F	/F	/F	24	F	/A	1	A	A	/A	1	N	3	/N	/N	N	3	M	4	/M	/M	M	4	.
$\chi_{18}^{(80)}$	24	/F	F	F	24	/F	A	1	/A	/A	A	1	/N	3	N	N	/N	3	/M	4	M	M	/M	4	.
$\chi_{18}^{(81)}$	24	F	/F	-/F	-24	-F	-/A	-1	-A	A	/A	1	N	3	/N	-/N	-N	-3	-M	-4	-/M	/M	M	4	.
$\chi_{18}^{(82)}$	24	/F	F	-F	-24	-/F	-A	-1	-/A	/A	A	1	/N	3	N	-N	-/N	-3	-/M	-4	-M	M	/M	4	.
$\chi_{18}^{(83)}$	24	F	/F	-/F	-24	-F	/A	1	A	-A	-/A	-1	N	3	/N	-/N	-N	-3	M	4	/M	-/M	-M	-4	.
$\chi_{18}^{(84)}$	24	/F	F	-F	-24	-/F	A	1	/A	-/A	-A	-1	/N	3	N	-N	-/N	-3	/M	4	M	-M	-/M	-4	.
$\chi_{18}^{(85)}$	30	30	30	30	30	30	-1	-1	-1	-1	-1	-1	3	3	3	3	3	3	2	2	2	2	2	2	.
$\chi_{18}^{(86)}$	30	30	30	30	30	30	1	1	1	1	1	1	3	3	3	3	3	3	-2	-2	-2	-2	-2	-2	.
$\chi_{18}^{(87)}$	30	30	30	-30	-30	-30	-1	-1	-1	1	1	1	3	3	3	-3	-3	-3	2	2	2	-2	-2	-2	.
$\chi_{18}^{(88)}$	30	30	30	-30	-30	-30	1	1	1	-1	-1	-1	3	3	3	-3	-3	-3	-2	-2	-2	2	2	2	.
$\chi_{18}^{(89)}$	30	G	/G	/G	30	G	-/A	-1	-A	-A	-/A	-1	N	3	/N	/N	N	3	O	2	/O	/O	O	2	.
$\chi_{18}^{(90)}$	30	/G	G	G	30	/G	-A	-1	-/A	-/A	-A	-1	/N	3	N	N	/N	3	/O	2	O	O	/O	2	.

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$\chi_{18}^{(91)}$	30	G	/G	/G	30	G	/A	1	A	A	/A	1	N	3	/N	/N	N	3	-O	-2	-/O	-/O	-O	-2	.
$\chi_{18}^{(92)}$	30	/G	G	G	30	/G	A	1	/A	/A	A	1	/N	3	N	N	/N	3	-/O	-2	-O	-O	-/O	-2	.
$\chi_{18}^{(93)}$	30	G	/G	-/G	-30	-G	-/A	-1	-A	A	/A	1	N	3	/N	-/N	-N	-3	O	2	/O	-/O	-O	-2	.
$\chi_{18}^{(94)}$	30	/G	G	-G	-30	-/G	-A	-1	-/A	/A	A	1	/N	3	N	-N	-/N	-3	/O	2	O	-O	-/O	-2	.
$\chi_{18}^{(95)}$	30	G	/G	-/G	-30	-G	/A	1	A	-A	-/A	-1	N	3	/N	-/N	-N	-3	-O	-2	-/O	/O	O	2	.
$\chi_{18}^{(96)}$	30	/G	G	-G	-30	-/G	A	1	/A	-/A	-A	-1	/N	3	N	-N	-/N	-3	-/O	-2	-O	O	/O	2	.
$\chi_{18}^{(97)}$	60	60	60	60	60	60	1	1	1	1	1	1	-3	-3	-3	-3	-3	-3	-2	-2	-2	-2	-2	-2	.
$\chi_{18}^{(98)}$	60	60	60	60	60	60	-1	-1	-1	-1	-1	-1	-3	-3	-3	-3	-3	-3	2	2	2	2	2	2	.
$\chi_{18}^{(99)}$	60	60	60	-60	-60	-60	1	1	1	-1	-1	-1	-3	-3	-3	3	3	3	-2	-2	-2	2	2	2	.
$\chi_{18}^{(100)}$	60	60	60	-60	-60	-60	-1	-1	-1	1	1	1	-3	-3	-3	3	3	3	2	2	2	-2	-2	-2	.
$\chi_{18}^{(101)}$	60	60	60	60	60	60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(102)}$	60	60	60	-60	-60	-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(103)}$	60	H	/H	/H	60	H	/A	1	A	A	/A	1	-N	-3	-/N	-/N	-N	-3	-O	-2	-/O	-/O	-O	-2	.
$\chi_{18}^{(104)}$	60	/H	H	H	60	/H	A	1	/A	/A	A	1	-/N	-3	-N	-N	-/N	-3	-/O	-2	-O	-O	-/O	-2	.
$\chi_{18}^{(105)}$	60	H	/H	/H	60	H	-/A	-1	-A	-A	-/A	-1	-N	-3	-/N	-/N	-N	-3	O	2	/O	/O	O	2	.
$\chi_{18}^{(106)}$	60	/H	H	H	60	/H	-A	-1	-/A	-/A	-A	-1	-/N	-3	-N	-N	-/N	-3	/O	2	O	O	/O	2	.
$\chi_{18}^{(107)}$	60	H	/H	-/H	-60	-H	/A	1	A	-A	-/A	-1	-N	-3	-/N	/N	N	3	-O	-2	-/O	/O	O	2	.
$\chi_{18}^{(108)}$	60	/H	H	-H	-60	-/H	A	1	/A	-/A	-A	-1	-/N	-3	-N	N	/N	3	-/O	-2	-O	O	/O	2	.
$\chi_{18}^{(109)}$	60	H	/H	-/H	-60	-H	-/A	-1	-A	A	/A	1	-N	-3	-/N	/N	N	3	O	2	/O	-/O	-O	-2	.
$\chi_{18}^{(110)}$	60	/H	H	-H	-60	-/H	-A	-1	-/A	/A	A	1	-/N	-3	-N	N	/N	3	/O	2	O	-O	-/O	-2	.
$\chi_{18}^{(111)}$	60	H	/H	/H	60	H	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(112)}$	60	/H	H	H	60	/H	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(113)}$	60	H	/H	-/H	-60	-H	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(114)}$	60	/H	H	-H	-60	-/H	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(115)}$	64	64	64	64	64	64	.	.	.	.	.	.	-2	-2	-2	-2	-2	-2	.	.	.	.	.	.	.
$\chi_{18}^{(116)}$	64	64	64	64	64	64	.	.	.	.	.	.	-2	-2	-2	-2	-2	-2	.	.	.	.	.	.	.
$\chi_{18}^{(117)}$	64	64	64	-64	-64	-64	.	.	.	.	.	.	-2	-2	-2	2	2	2	.	.	.	.	.	.	.
$\chi_{18}^{(118)}$	64	64	64	-64	-64	-64	.	.	.	.	.	.	-2	-2	-2	2	2	2	.	.	.	.	.	.	.
$\chi_{18}^{(119)}$	64	I	/I	/I	64	I	.	.	.	.	.	.	-O	-2	-/O	-/O	-O	-2	.	.	.	.	.	.	.
$\chi_{18}^{(120)}$	64	/I	I	I	64	/I	.	.	.	.	.	.	-/O	-2	-O	-O	-/O	-2	.	.	.	.	.	.	.
$\chi_{18}^{(121)}$	64	I	/I	/I	64	I	.	.	.	.	.	.	-O	-2	-/O	-/O	-O	-2	.	.	.	.	.	.	.
$\chi_{18}^{(122)}$	64	/I	I	I	64	/I	.	.	.	.	.	.	-/O	-2	-O	-O	-/O	-2	.	.	.	.	.	.	.
$\chi_{18}^{(123)}$	64	I	/I	-/I	-64	-I	.	.	.	.	.	.	-O	-2	-/O	/O	O	2	.	.	.	.	.	.	.
$\chi_{18}^{(124)}$	64	/I	I	-I	-64	-/I	.	.	.	.	.	.	-/O	-2	-O	O	/O	2	.	.	.	.	.	.	.
$\chi_{18}^{(125)}$	64	I	/I	-/I	-64	-I	.	.	.	.	.	.	-O	-2	-/O	/O	O	2	.	.	.	.	.	.	.
$\chi_{18}^{(126)}$	64	/I	I	-I	-64	-/I	.	.	.	.	.	.	-/O	-2	-O	O	/O	2	.	.	.	.	.	.	.
$\chi_{18}^{(127)}$	80	80	80	80	80	80	.	.	.	.	.	.	2	2	2	2	2	2	.	.	.	.	.	.	.
$\chi_{18}^{(128)}$	80	80	80	-80	-80	-80	.	.	.	.	.	.	2	2	2	-2	-2	-2	.	.	.	.	.	.	.
$\chi_{18}^{(129)}$	80	J	/J	/J	80	J	.	.	.	.	.	.	O	2	/O	/O	O	2	.	.	.	.	.	.	.
$\chi_{18}^{(130)}$	80	/J	J	J	80	/J	.	.	.	.	.	.	/O	2	O	O	/O	2	.	.	.	.	.	.	.
$\chi_{18}^{(131)}$	80	J	/J	-/J	-80	-J	.	.	.	.	.	.	O	2	/O	-/O	-O	-2	.	.	.	.	.	.	.
$\chi_{18}^{(132)}$	80	/J	J	-J	-80	-/J	.	.	.	.	.	.	/O	2	O	-O	-/O	-2	.	.	.	.	.	.	.
$\chi_{18}^{(133)}$	81	81	81	81	81	81	-3	-3	-3	-3	-3	-3	-1
$\chi_{18}^{(134)}$	81	81	81	81	81	81	3	3	3	3	3	3	-1
$\chi_{18}^{(135)}$	81	81	81	-81	-81	-81	-3	-3	-3	3	3	3	-1

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$\chi_{18}^{(136)}$	81	81	81	-81	-81	-81	3	3	3	-3	-3	-3	-1	
$\chi_{18}^{(137)}$	81	K	/K	/K	81	K	-N	-3	-/N	-/N	-N	-3	-1	
$\chi_{18}^{(138)}$	81	/K	K	K	81	/K	-/N	-3	-N	-N	-/N	-3	-1	
$\chi_{18}^{(139)}$	81	K	/K	/K	81	K	.	.	.	.	.	.	.	.	.	.	N	3	/N	/N	N	3	-1
$\chi_{18}^{(140)}$	81	/K	K	K	81	/K	.	.	.	.	.	.	.	.	.	.	/N	3	N	N	/N	3	-1
$\chi_{18}^{(141)}$	81	K	/K	-/K	-81	-K	.	.	.	.	.	.	.	.	.	.	-N	-3	-/N	/N	N	3	-1
$\chi_{18}^{(142)}$	81	/K	K	-K	-81	-/K	.	.	.	.	.	.	.	.	.	.	-/N	-3	-N	N	/N	3	-1
$\chi_{18}^{(143)}$	81	K	/K	-/K	-81	-K	.	.	.	.	.	.	.	.	.	.	N	3	/N	-/N	-N	-3	-1
$\chi_{18}^{(144)}$	81	/K	K	-K	-81	-/K	.	.	.	.	.	.	.	.	.	.	/N	3	N	-N	-/N	-3	-1
$\chi_{18}^{(145)}$	90	90	90	90	90	90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2
$\chi_{18}^{(146)}$	90	90	90	-90	-90	-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2
$\chi_{18}^{(147)}$	90	L	/L	/L	90	L	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2
$\chi_{18}^{(148)}$	90	/L	L	L	90	/L	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2
$\chi_{18}^{(149)}$	90	L	/L	-/L	-90	-L	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2
$\chi_{18}^{(150)}$	90	/L	L	-L	-90	-/L	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2
		30										40												
$\chi_{18}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
$\chi_{18}^{(2)}$	1	1	-1	-1	-1	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	-1	
$\chi_{18}^{(3)}$	1	1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	-1	-1	1	
$\chi_{18}^{(4)}$	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
$\chi_{18}^{(5)}$	A	/A	-/A	-1	-A	A	/A	1	-1	-A	-/A	-A	-/A	-1	1	A	/A	-1	-A	-/A	/A	1	A	-1
$\chi_{18}^{(6)}$	/A	A	-A	-1	-/A	/A	A	1	-1	-/A	-A	-/A	-A	-1	1	/A	A	-1	-/A	-A	A	1	/A	-1
$\chi_{18}^{(7)}$	A	/A	-/A	-1	-A	A	/A	1	-1	-A	-/A	A	/A	1	-1	-A	-/A	1	A	/A	-/A	-1	-A	1
$\chi_{18}^{(8)}$	/A	A	-A	-1	-/A	/A	A	1	-1	-/A	-A	/A	A	1	-1	-/A	-A	1	/A	A	-A	-1	-/A	1
$\chi_{18}^{(9)}$	A	/A	/A	1	A	A	/A	1	1	A	/A	-A	-/A	-1	-1	-A	-/A	-1	-A	-/A	-/A	-1	-A	-1
$\chi_{18}^{(10)}$	/A	A	A	1	/A	/A	A	1	1	/A	A	-/A	-A	-1	-1	-/A	-A	-1	-/A	-A	-A	-1	-/A	-1
$\chi_{18}^{(11)}$	A	/A	/A	1	A	A	/A	1	1	A	/A	A	/A	1	1	A	/A	1	A	/A	/A	1	A	1
$\chi_{18}^{(12)}$	/A	A	A	1	/A	/A	A	1	1	/A	A	/A	A	1	1	/A	A	1	/A	A	A	1	/A	1
$\chi_{18}^{(13)}$	.	.	.	.	.	2	2	2	2	2	2	2	2	2	2	2	2	-2	-2	-2	-2	-2	-4
$\chi_{18}^{(14)}$	.	.	.	.	.	2	2	2	2	2	2	-2	-2	-2	-2	-2	-2	2	2	2	2	2	4
$\chi_{18}^{(15)}$	.	.	.	.	.	2	2	2	-2	-2	-2	2	2	2	-2	-2	-2	-2	-2	-2	2	2	-4
$\chi_{18}^{(16)}$	.	.	.	.	.	2	2	2	-2	-2	-2	-2	-2	-2	2	2	2	2	2	2	-2	-2	4
$\chi_{18}^{(17)}$	/O	O	2	2	/O	O	/O	O	2	2	/O	O	-2	-/O	-O	-O	-2	-/O	-4
$\chi_{18}^{(18)}$	O	/O	2	2	O	/O	O	/O	2	2	O	/O	-2	-O	-/O	-/O	-2	-O	-4
$\chi_{18}^{(19)}$	/O	O	2	2	/O	O	-/O	-O	-2	-2	-/O	-O	2	/O	O	O	2	/O	4
$\chi_{18}^{(20)}$	O	/O	2	2	O	/O	-O	-/O	-2	-2	-O	-/O	2	O	/O	/O	2	O	4

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$\chi_{18}^{(21)}$	/O	O	2	-2	-/O	-O	/O	O	2	-2	-/O	-O	-2	-/O	-O	O	2	/O	-4
$\chi_{18}^{(22)}$	O	/O	2	-2	-O	-/O	O	/O	2	-2	-O	-/O	-2	-O	-/O	/O	2	O	-4
$\chi_{18}^{(23)}$	/O	O	2	-2	-/O	-O	-/O	-O	-2	2	/O	O	2	/O	O	-O	-2	-/O	4
$\chi_{18}^{(24)}$	O	/O	2	-2	-O	-/O	-O	-/O	-2	2	O	/O	2	O	/O	-/O	-2	-O	4
$\chi_{18}^{(25)}$	-2	-2	-2	-2	-2	2	2	2	2	2	2	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(26)}$	-2	-2	2	2	2	2	2	2	-2	-2	-2	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(27)}$	-/O	-O	-O	-2	-/O	/O	O	2	2	/O	O	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(28)}$	-O	-/O	-/O	-2	-O	O	/O	2	2	O	/O	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(29)}$	-/O	-O	O	2	/O	/O	O	2	-2	-/O	-O	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(30)}$	-O	-/O	/O	2	O	O	/O	2	-2	-O	-/O	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(31)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-5	
$\chi_{18}^{(32)}$	1	1	1	1	1	3	3	3	3	3	3	-3	-3	-3	-3	-3	-3	1	1	1	1	1	-5	
$\chi_{18}^{(33)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	1	1	5	
$\chi_{18}^{(34)}$	1	1	1	1	1	3	3	3	3	3	3	3	3	3	3	3	3	-1	-1	-1	-1	-1	5	
$\chi_{18}^{(35)}$	-1	-1	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	-5	
$\chi_{18}^{(36)}$	1	1	-1	-1	-1	3	3	3	-3	-3	-3	-3	-3	-3	3	3	3	1	1	1	-1	-1	-5	
$\chi_{18}^{(37)}$	-1	-1	1	1	1	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	1	1	1	-1	-1	5	
$\chi_{18}^{(38)}$	1	1	-1	-1	-1	3	3	3	-3	-3	-3	3	3	3	-3	-3	-3	-1	-1	-1	1	1	5	
$\chi_{18}^{(39)}$	-A	-/A	-/A	-1	-A	-A	-/A	-1	-1	-A	-/A	-A	-/A	-1	-1	-A	-/A	-1	-A	-/A	-/A	-1	-A	
$\chi_{18}^{(40)}$	-/A	-A	-A	-1	-/A	-/A	-A	-1	-1	-/A	-A	-/A	-A	-1	-1	-/A	-A	-1	-/A	-A	-A	-1	-/A	
$\chi_{18}^{(41)}$	A	/A	/A	1	A	/N	N	3	3	/N	N	-/N	-N	-3	-3	-/N	-N	1	A	/A	/A	1	A	
$\chi_{18}^{(42)}$	/A	A	A	1	/A	N	/N	3	3	N	/N	-N	-/N	-3	-3	-N	-/N	1	/A	A	A	1	/A	
$\chi_{18}^{(43)}$	-A	-/A	-/A	-1	-A	-A	-/A	-1	-1	-A	-/A	A	/A	1	1	A	/A	1	A	/A	/A	1	A	
$\chi_{18}^{(44)}$	-/A	-A	-A	-1	-/A	-/A	-A	-1	-1	-/A	-A	/A	A	1	1	/A	A	1	/A	A	A	1	/A	
$\chi_{18}^{(45)}$	A	/A	/A	1	A	/N	N	3	3	/N	N	/N	N	3	3	/N	N	-1	-A	-/A	-/A	-1	-A	
$\chi_{18}^{(46)}$	/A	A	A	1	/A	N	/N	3	3	N	/N	N	/N	3	3	N	/N	-1	-/A	-A	-A	-1	-/A	
$\chi_{18}^{(47)}$	-A	-/A	/A	1	A	-A	-/A	-1	1	A	/A	-A	-/A	-1	1	A	/A	-1	-A	-/A	/A	1	A	
$\chi_{18}^{(48)}$	-/A	-A	A	1	/A	-/A	-A	-1	1	/A	A	-/A	-A	-1	1	/A	A	-1	-/A	-A	A	1	/A	
$\chi_{18}^{(49)}$	A	/A	-/A	-1	-A	/N	N	3	-3	-/N	-N	-/N	-N	-3	3	/N	N	1	A	/A	-/A	-1	-A	
$\chi_{18}^{(50)}$	/A	A	-A	-1	-/A	N	/N	3	-3	-N	-/N	-N	-/N	-3	3	N	/N	1	/A	A	-A	-1	-/A	
$\chi_{18}^{(51)}$	-A	-/A	/A	1	A	-A	-/A	-1	1	A	/A	A	/A	1	-1	-A	-/A	1	A	/A	-/A	-1	-A	
$\chi_{18}^{(52)}$	-/A	-A	A	1	/A	-/A	-A	-1	1	/A	A	/A	A	1	-1	-/A	-A	1	/A	A	-A	-1	-/A	
$\chi_{18}^{(53)}$	A	/A	-/A	-1	-A	/N	N	3	-3	-/N	-N	/N	N	3	-3	-/N	-N	-1	-A	-/A	/A	1	A	
$\chi_{18}^{(54)}$	/A	A	-A	-1	-/A	N	/N	3	-3	-N	-/N	N	/N	3	-3	-N	-/N	-1	-/A	-A	A	1	/A	
$\chi_{18}^{(55)}$	.	.	.	.	.	4	4	4	4	4	4	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-10
$\chi_{18}^{(56)}$	.	.	.	.	.	4	4	4	4	4	4	2	2	2	2	2	2	2	2	2	2	2	10
$\chi_{18}^{(57)}$	.	.	.	.	.	4	4	4	-4	-4	-4	-2	-2	-2	2	2	2	-2	-2	-2	2	2	-10
$\chi_{18}^{(58)}$	.	.	.	.	.	4	4	4	-4	-4	-4	2	2	2	-2	-2	-2	2	2	2	-2	-2	10
$\chi_{18}^{(59)}$	.	.	.	.	.	-4	-4	-4	-4	-4	-4	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(60)}$	.	.	.	.	.	-4	-4	-4	4	4	4	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(61)}$	.	.	.	.	.	/M	M	4	4	/M	M	-/O	-O	-2	-2	-/O	-O	-2	-/O	-O	-O	-2	-/O
$\chi_{18}^{(62)}$	.	.	.	.	.	M	/M	4	4	M	/M	-O	-/O	-2	-2	-O	-/O	-2	-O	-/O	-/O	-2	-O
$\chi_{18}^{(63)}$	/M	M	4	4	/M	M	/O	O	2	2	/O	O	2	/O	O	O	2	/O	
$\chi_{18}^{(64)}$	M	/M	4	4	M	/M	O	/O	2	2	O	/O	2	O	/O	/O	2	O	
$\chi_{18}^{(65)}$	/M	M	4	-4	-/M	-M	-/O	-O	-2	2	/O	O	-2	-/O	-O	O	2	/O	

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$\chi_{18}^{(66)}$	M	/M	4	-4	-M	-/M	-O	-/O	-2	2	O	/O	-2	-O	-/O	/O	2	O	-10
$\chi_{18}^{(67)}$	/M	M	4	-4	-/M	-M	/O	O	2	-2	-/O	-O	2	/O	O	-O	-2	-/O	10
$\chi_{18}^{(68)}$	M	/M	4	-4	-M	-/M	O	/O	2	-2	-O	-/O	2	O	/O	-/O	-2	-O	10
$\chi_{18}^{(69)}$	-/M	-M	-4	-4	-/M	-M	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(70)}$	-M	-/M	-4	-4	-M	-/M	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(71)}$	-/M	-M	-4	4	/M	M	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(72)}$	-M	-/M	-4	4	M	/M	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(73)}$	-4
$\chi_{18}^{(74)}$	4
$\chi_{18}^{(75)}$	-4
$\chi_{18}^{(76)}$	4
$\chi_{18}^{(77)}$	-4
$\chi_{18}^{(78)}$	-4
$\chi_{18}^{(79)}$	4
$\chi_{18}^{(80)}$	4
$\chi_{18}^{(81)}$	-4
$\chi_{18}^{(82)}$	-4
$\chi_{18}^{(83)}$	4
$\chi_{18}^{(84)}$	4
$\chi_{18}^{(85)}$	2	2	2	2	2	2	4	4	4	4	4	4	.	.	.	.	.	.	-10
$\chi_{18}^{(86)}$	2	2	2	2	2	2	-4	-4	-4	-4	-4	-4	.	.	.	.	.	.	10
$\chi_{18}^{(87)}$	2	2	2	-2	-2	-2	4	4	4	-4	-4	-4	.	.	.	.	.	.	-10
$\chi_{18}^{(88)}$	2	2	2	-2	-2	-2	-4	-4	-4	4	4	4	.	.	.	.	.	.	10
$\chi_{18}^{(89)}$	/O	O	2	2	/O	O	/M	M	4	4	/M	M	.	.	.	.	.	.	-10
$\chi_{18}^{(90)}$	O	/O	2	2	O	/O	M	/M	4	4	M	/M	.	.	.	.	.	.	-10
$\chi_{18}^{(91)}$	/O	O	2	2	/O	O	-/M	-M	-4	-4	-/M	-M	.	.	.	.	.	.	10
$\chi_{18}^{(92)}$	O	/O	2	2	O	/O	-M	-/M	-4	-4	-M	-/M	.	.	.	.	.	.	10
$\chi_{18}^{(93)}$	/O	O	2	-2	-/O	-O	/M	M	4	-4	-/M	-M	.	.	.	.	.	.	-10
$\chi_{18}^{(94)}$	O	/O	2	-2	-O	-/O	M	/M	4	-4	-M	-/M	.	.	.	.	.	.	-10
$\chi_{18}^{(95)}$	/O	O	2	-2	-/O	-O	-/M	-M	-4	4	/M	M	.	.	.	.	.	.	10
$\chi_{18}^{(96)}$	O	/O	2	-2	-O	-/O	-M	-/M	-4	4	M	/M	.	.	.	.	.	.	10
$\chi_{18}^{(97)}$	4	4	4	4	4	4	2	2	2	2	2	2	2	2	2	2	2	2	-10
$\chi_{18}^{(98)}$	4	4	4	4	4	4	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	10
$\chi_{18}^{(99)}$	4	4	4	-4	-4	-4	2	2	2	-2	-2	-2	2	2	2	-2	-2	-2	-10
$\chi_{18}^{(100)}$	4	4	4	-4	-4	-4	-2	-2	-2	2	2	2	-2	-2	-2	2	2	2	10
$\chi_{18}^{(101)}$	4	4	4	4	4	4	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(102)}$	4	4	4	-4	-4	-4	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(103)}$	/M	M	4	4	/M	M	/O	O	2	2	/O	O	2	/O	O	O	2	/O	-10
$\chi_{18}^{(104)}$	M	/M	4	4	M	/M	O	/O	2	2	O	/O	2	O	/O	/O	2	O	-10
$\chi_{18}^{(105)}$	/M	M	4	4	/M	M	-/O	-O	-2	-2	-/O	-O	-2	-/O	-O	-O	-2	-/O	10
$\chi_{18}^{(106)}$	M	/M	4	4	M	/M	-O	-/O	-2	-2	-O	-/O	-2	-O	-/O	-/O	-2	-O	10
$\chi_{18}^{(107)}$	/M	M	4	-4	-/M	-M	/O	O	2	-2	-/O	-O	2	/O	O	-O	-2	-/O	-10
$\chi_{18}^{(108)}$	M	/M	4	-4	-M	-/M	O	/O	2	-2	-O	-/O	2	O	/O	-/O	-2	-O	-10
$\chi_{18}^{(109)}$	/M	M	4	-4	-/M	-M	-/O	-O	-2	2	/O	O	-2	-/O	-O	O	2	/O	10
$\chi_{18}^{(110)}$	M	/M	4	-4	-M	-/M	-O	-/O	-2	2	O	/O	-2	-O	-/O	/O	2	O	10

	30											40															
$\chi_{18}^{(111)}$	.	.	.	.	.	/M	M	4	4	/M	M	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(112)}$	.	.	.	.	.	M	/M	4	4	M	/M	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(113)}$	.	.	.	.	.	/M	M	4	-4	-/M	-M	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(114)}$	.	.	.	.	.	M	/M	4	-4	-M	-/M	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(115)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-16
$\chi_{18}^{(116)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	16
$\chi_{18}^{(117)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-16
$\chi_{18}^{(118)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	16
$\chi_{18}^{(119)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-16
$\chi_{18}^{(120)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-16
$\chi_{18}^{(121)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	16
$\chi_{18}^{(122)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	16
$\chi_{18}^{(123)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-16
$\chi_{18}^{(124)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-16
$\chi_{18}^{(125)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	16
$\chi_{18}^{(126)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	16
$\chi_{18}^{(127)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(128)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(129)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(130)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(131)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(132)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(133)}$	-1	-1	-1	-1	-1	-3	-3	-3	-3	-3	-3	3	3	3	3	3	3	-1	-1	-1	-1	-1	-1	-1	-1	9	
$\chi_{18}^{(134)}$	-1	-1	-1	-1	-1	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	1	1	1	1	1	1	1	1	-9	
$\chi_{18}^{(135)}$	-1	-1	1	1	1	-3	-3	-3	3	3	3	3	3	3	-3	-3	-3	-1	-1	-1	1	1	1	1	1	9	
$\chi_{18}^{(136)}$	-1	-1	1	1	1	-3	-3	-3	3	3	3	-3	-3	-3	3	3	3	1	1	1	-1	-1	-1	-1	-1	-9	
$\chi_{18}^{(137)}$	-A	-/A	-/A	-1	-A	-/N	-N	-3	-3	-/N	-N	/N	N	3	3	/N	N	-1	-A	-/A	-/A	-1	-A	-A	-1	-A	9
$\chi_{18}^{(138)}$	-/A	-A	-A	-1	-/A	-N	-/N	-3	-3	-N	-/N	N	/N	3	3	N	/N	-1	-/A	-A	-A	-1	-/A	-A	-1	-/A	9
$\chi_{18}^{(139)}$	-A	-/A	-/A	-1	-A	-/N	-N	-3	-3	-/N	-N	-/N	-N	-3	-3	-/N	-N	1	A	/A	/A	1	A	A	1	A	-9
$\chi_{18}^{(140)}$	-/A	-A	-A	-1	-/A	-N	-/N	-3	-3	-N	-/N	-N	-/N	-3	-3	-N	-/N	1	/A	A	A	1	/A	A	1	/A	-9
$\chi_{18}^{(141)}$	-A	-/A	/A	1	A	-/N	-N	-3	3	/N	N	/N	N	3	-3	-/N	-N	-1	-A	-/A	/A	1	A	A	1	A	9
$\chi_{18}^{(142)}$	-/A	-A	A	1	/A	-N	-/N	-3	3	N	/N	N	/N	3	-3	-N	-/N	-1	-/A	-A	A	1	/A	A	1	/A	9
$\chi_{18}^{(143)}$	-A	-/A	/A	1	A	-/N	-N	-3	3	/N	N	-/N	-N	-3	3	/N	N	1	A	/A	-/A	-1	-A	-A	-1	-A	-9
$\chi_{18}^{(144)}$	-/A	-A	A	1	/A	-N	-/N	-3	3	N	/N	-N	-/N	-3	3	N	/N	1	/A	A	-A	-1	-/A	-A	-1	-/A	-9
$\chi_{18}^{(145)}$	2	2	2	2	2	-6	-6	-6	-6	-6	-6	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(146)}$	2	2	-2	-2	-2	-6	-6	-6	6	6	6	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(147)}$	/O	O	O	2	/O	-B	-/B	-6	-6	-B	-/B	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(148)}$	O	/O	/O	2	O	-/B	-B	-6	-6	-/B	-B	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(149)}$	/O	O	-O	-2	-/O	-B	-/B	-6	6	B	/B	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(150)}$	O	/O	-/O	-2	-O	-/B	-B	-6	6	/B	B	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

	50										60										70									
$\chi_{18}^{(46)}$	-/P	-P	-P	5	-/P	O	/O	2	2	O	/O		
$\chi_{18}^{(47)}$	P	/P	-/P	5	-P	A	/A	1	-1	-A	-/A	N	3	/N	-/N	-N	-3	-/A	-1	-A	A	/A	A	/A	A	/A	A	1		
$\chi_{18}^{(48)}$	/P	P	-P	5	-/P	/A	A	1	-1	-/A	-A	/N	3	N	-N	-/N	-3	-A	-1	-/A	/A	A	/A	A	/A	A	1			
$\chi_{18}^{(49)}$	P	/P	-/P	5	-P	-/O	-O	-2	2	/O	O	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(50)}$	/P	P	-P	5	-/P	-O	-/O	-2	2	O	/O	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(51)}$	-P	-/P	/P	-5	P	-A	-/A	-1	1	A	/A	N	3	/N	-/N	-N	-3	-/A	-1	-A	A	/A	A	/A	A	/A	1			
$\chi_{18}^{(52)}$	-/P	-P	P	-5	/P	-/A	-A	-1	1	/A	A	/N	3	N	-N	-/N	-3	-A	-1	-/A	/A	A	/A	A	/A	A	1			
$\chi_{18}^{(53)}$	-P	-/P	/P	-5	P	/O	O	2	-2	-/O	-O	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(54)}$	-/P	-P	P	-5	/P	O	/O	2	-2	-O	-/O	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(55)}$	-10	-10	-10	-10	-10	-1	-1	-1	-1	-1	-1	5	5	5	5	5	5	1	1	1	1	1	1	1	1	1	1			
$\chi_{18}^{(56)}$	10	10	10	10	10	1	1	1	1	1	1	5	5	5	5	5	5	1	1	1	1	1	1	1	1	1	1			
$\chi_{18}^{(57)}$	-10	-10	10	10	10	-1	-1	-1	1	1	1	5	5	5	-5	-5	-5	1	1	1	-1	-1	-1	-1	-1	-1	-1			
$\chi_{18}^{(58)}$	10	10	-10	-10	-10	1	1	1	-1	-1	-1	5	5	5	-5	-5	-5	1	1	1	-1	-1	-1	-1	-1	-1	-1			
$\chi_{18}^{(59)}$	.	.	.	.	.	.	.	.	.	.	.	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
$\chi_{18}^{(60)}$	.	.	.	.	.	.	.	.	.	.	.	2	2	2	-2	-2	-2	2	2	2	-2	-2	-2	-2	-2	-2	-2
$\chi_{18}^{(61)}$	-C	-/C	-/C	-10	-C	-A	-/A	-1	-1	-A	-/A	-/P	5	-P	-P	-/P	5	/A	1	A	A	/A	A	/A	A	/A	1			
$\chi_{18}^{(62)}$	-/C	-C	-C	-10	-/C	-/A	-A	-1	-1	-/A	-A	-P	5	-/P	-/P	-P	5	A	1	/A	/A	A	/A	A	/A	A	1			
$\chi_{18}^{(63)}$	C	/C	/C	10	C	A	/A	1	1	A	/A	-/P	5	-P	-P	-/P	5	/A	1	A	A	/A	A	/A	A	/A	1			
$\chi_{18}^{(64)}$	/C	C	C	10	/C	/A	A	1	1	/A	A	-P	5	-/P	-/P	-P	5	A	1	/A	/A	A	/A	A	/A	A	1			
$\chi_{18}^{(65)}$	-C	-/C	/C	10	C	-A	-/A	-1	1	A	/A	-/P	5	-P	P	/P	-5	/A	1	A	-A	-/A	-A	-/A	-A	-1	-1			
$\chi_{18}^{(66)}$	-/C	-C	C	10	/C	-/A	-A	-1	1	/A	A	-P	5	-/P	/P	P	-5	A	1	/A	-/A	-A	-/A	-A	-1	-1	-1			
$\chi_{18}^{(67)}$	C	/C	-/C	-10	-C	A	/A	1	-1	-A	-/A	-/P	5	-P	P	/P	-5	/A	1	A	-A	-/A	-A	-/A	-A	-1	-1			
$\chi_{18}^{(68)}$	/C	C	-C	-10	-/C	/A	A	1	-1	-/A	-A	-P	5	-/P	/P	P	-5	A	1	/A	-/A	-A	-/A	-A	-1	-1	-1			
$\chi_{18}^{(69)}$	.	.	.	.	.	.	.	.	.	.	.	O	2	/O	/O	O	2	O	2	/O	/O	O	2	O	2	O	2
$\chi_{18}^{(70)}$	.	.	.	.	.	.	.	.	.	.	.	/O	2	O	O	/O	2	/O	2	O	O	/O	2	O	2	O	2
$\chi_{18}^{(71)}$	.	.	.	.	.	.	.	.	.	.	.	O	2	/O	-/O	-O	-2	O	2	/O	-/O	-O	-2	O	2	-/O	-2
$\chi_{18}^{(72)}$	.	.	.	.	.	.	.	.	.	.	.	/O	2	O	-O	-/O	-2	/O	2	O	-O	-/O	-2	O	2	-/O	-2
$\chi_{18}^{(73)}$	-4	-4	-4	-4	-4	2	2	2	2	2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(74)}$	4	4	4	4	4	-2	-2	-2	-2	-2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(75)}$	-4	-4	4	4	4	2	2	2	-2	-2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(76)}$	4	4	-4	-4	-4	-2	-2	-2	2	2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(77)}$	-/M	-M	-M	-4	-/M	/O	O	2	2	/O	O	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(78)}$	-M	-/M	-/M	-4	-M	O	/O	2	2	O	/O	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(79)}$	/M	M	M	4	/M	-/O	-O	-2	-2	-/O	-O	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(80)}$	M	/M	/M	4	M	-O	-/O	-2	-2	-O	-/O	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(81)}$	-/M	-M	M	4	/M	/O	O	2	-2	-/O	-O	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(82)}$	-M	-/M	/M	4	M	O	/O	2	-2	-O	-/O	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(83)}$	/M	M	-M	-4	-/M	-/O	-O	-2	2	/O	O	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(84)}$	M	/M	-/M	-4	-M	-O	-/O	-2	2	O	/O	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(85)}$	-10	-10	-10	-10	-10	-1	-1	-1	-1	-1	-1	3	3	3	3	3	3	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1			
$\chi_{18}^{(86)}$	10	10	10	10	10	1	1	1	1	1	1	3	3	3	3	3	3	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1			
$\chi_{18}^{(87)}$	-10	-10	10	10	10	-1	-1	-1	1	1	1	3	3	3	-3	-3	-3	-1	-1	-1	1	1	1	1	1	1	1			
$\chi_{18}^{(88)}$	10	10	-10	-10	-10	1	1	1	-1	-1	-1	3	3	3	-3	-3	-3	-1	-1	-1	1	1	1	1	1	1	1			
$\chi_{18}^{(89)}$	-C	-/C	-/C	-10	-C	-A	-/A	-1	-1	-A	-/A	N	3	/N	/N	N	3	-/A	-1	-A	-A	-/A	-A	-/A	-A	-1	-1			
$\chi_{18}^{(90)}$	-/C	-C	-C	-10	-/C	-/A	-A	-1	-1	-/A	-A	/N	3	N	N	/N	3	-A	-1	-/A	-/A	-A	-/A	-A	-1	-1	-1			

	50					60										70									
$\chi_{18}^{(136)}$	-9	-9	9	9	9	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(137)}$	R	/R	/R	9	R	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(138)}$	/R	R	R	9	/R	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(139)}$	-R	-/R	-/R	-9	-R	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(140)}$	-/R	-R	-R	-9	-/R	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(141)}$	R	/R	-/R	-9	-R	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(142)}$	/R	R	-R	-9	-/R	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(143)}$	-R	-/R	/R	9	R	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(144)}$	-/R	-R	R	9	/R	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(145)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(146)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(147)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(148)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(149)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(150)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
χ_{18}	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	80															90									
$\chi_{18}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{18}^{(2)}$	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	1	1	-1	-1
$\chi_{18}^{(3)}$	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	1	1	-1	-1
$\chi_{18}^{(4)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{18}^{(5)}$	1	A	/A	-/A	-1	-A	A	/A	1	-1	-A	-/A	A	/A	1	-1	-A	-/A	1	A	/A	-/A	-/A	-/A	-/A
$\chi_{18}^{(6)}$	1	/A	A	-A	-1	-/A	/A	A	1	-1	-/A	-A	/A	A	1	-1	-/A	-A	1	/A	A	A	-A	-A	-A
$\chi_{18}^{(7)}$	1	A	/A	-/A	-1	-A	A	/A	1	-1	-A	-/A	A	/A	1	-1	-A	-/A	1	A	/A	-/A	-/A	-/A	-/A
$\chi_{18}^{(8)}$	1	/A	A	-A	-1	-/A	/A	A	1	-1	-/A	-A	/A	A	1	-1	-/A	-A	1	/A	A	A	-A	-A	-A
$\chi_{18}^{(9)}$	1	A	/A	/A	1	A	A	/A	1	1	A	/A	A	/A	1	1	A	/A	1	A	/A	/A	/A	/A	/A
$\chi_{18}^{(10)}$	1	/A	A	A	1	/A	/A	A	1	1	/A	A	/A	A	1	1	/A	A	1	/A	A	A	A	A	A
$\chi_{18}^{(11)}$	1	A	/A	/A	1	A	A	/A	1	1	A	/A	A	/A	1	1	A	/A	1	A	/A	/A	/A	/A	/A
$\chi_{18}^{(12)}$	1	/A	A	A	1	/A	/A	A	1	1	/A	A	/A	A	1	1	/A	A	1	/A	A	A	A	A	A
$\chi_{18}^{(13)}$	1	1	1	1	1	1	-3	-3	-3	-3	-3	-3	-2	-2	-2	-2	-2	-2	-2	-1	-1	-1	-1	-1	-1
$\chi_{18}^{(14)}$	1	1	1	1	1	1	-3	-3	-3	-3	-3	-3	-2	-2	-2	-2	-2	-2	-2	-1	-1	-1	-1	-1	-1
$\chi_{18}^{(15)}$	1	1	1	-1	-1	-1	-3	-3	-3	3	3	3	-2	-2	-2	2	2	2	2	-1	-1	-1	-1	-1	-1
$\chi_{18}^{(16)}$	1	1	1	-1	-1	-1	-3	-3	-3	3	3	3	-2	-2	-2	2	2	2	2	-1	-1	-1	-1	-1	-1
$\chi_{18}^{(17)}$	1	A	/A	/A	1	A	-/N	-N	-3	-3	-/N	-N	-/O	-O	-2	-2	-/O	-O	-1	-A	-/A	-/A	-/A	-/A	-/A
$\chi_{18}^{(18)}$	1	/A	A	A	1	/A	-N	-/N	-3	-3	-N	-/N	-O	-/O	-2	-2	-O	-/O	-1	-/A	-A	-A	-A	-A	-A
$\chi_{18}^{(19)}$	1	A	/A	/A	1	A	-/N	-N	-3	-3	-/N	-N	-/O	-O	-2	-2	-/O	-O	-1	-A	-/A	-/A	-/A	-/A	-/A
$\chi_{18}^{(20)}$	1	/A	A	A	1	/A	-N	-/N	-3	-3	-N	-/N	-O	-/O	-2	-2	-O	-/O	-1	-/A	-A	-A	-A	-A	-A

	80												90									
$\chi_{18}^{(21)}$	1	A	/A	-/A	-1	-A	-/N	-N	-3	3	/N	N	-/O	-O	-2	2	/O	O	-1	-A	-/A	/A
$\chi_{18}^{(22)}$	1	/A	A	-A	-1	-/A	-N	-/N	-3	3	N	/N	-O	-/O	-2	2	O	/O	-1	-/A	-A	A
$\chi_{18}^{(23)}$	1	A	/A	-/A	-1	-A	-/N	-N	-3	3	/N	N	-/O	-O	-2	2	/O	O	-1	-A	-/A	/A
$\chi_{18}^{(24)}$	1	/A	A	-A	-1	-/A	-N	-/N	-3	3	N	/N	-O	-/O	-2	2	O	/O	-1	-/A	-A	A
$\chi_{18}^{(25)}$	-3	-3	-3	-3	-3	-3	1	1	1	1	1	1	-6	-6	-6	-6	-6	-6	-1	-1	-1	-1
$\chi_{18}^{(26)}$	-3	-3	-3	3	3	3	1	1	1	-1	-1	-1	-6	-6	-6	6	6	6	-1	-1	-1	1
$\chi_{18}^{(27)}$	-3	-/N	-N	-N	-3	-/N	A	/A	1	1	A	/A	-B	-/B	-6	-6	-B	-/B	-1	-A	-/A	-/A
$\chi_{18}^{(28)}$	-3	-N	-/N	-/N	-3	-N	/A	A	1	1	/A	A	-/B	-B	-6	-6	-/B	-B	-1	-/A	-A	-A
$\chi_{18}^{(29)}$	-3	-/N	-N	N	3	/N	A	/A	1	-1	-A	-/A	-B	-/B	-6	6	B	/B	-1	-A	-/A	/A
$\chi_{18}^{(30)}$	-3	-N	-/N	/N	3	N	/A	A	1	-1	-/A	-A	-/B	-B	-6	6	/B	B	-1	-/A	-A	A
$\chi_{18}^{(31)}$	2	2	2	2	2	2	6	6	6	6	6	6	-1	-1	-1	-1	-1	-1	.	.	.	.
$\chi_{18}^{(32)}$	1	1	1	1	1	1	-3	-3	-3	-3	-3	-3	7	7	7	7	7	7	-1	-1	-1	-1
$\chi_{18}^{(33)}$	2	2	2	2	2	2	6	6	6	6	6	6	-1	-1	-1	-1	-1	-1	.	.	.	.
$\chi_{18}^{(34)}$	1	1	1	1	1	1	-3	-3	-3	-3	-3	-3	7	7	7	7	7	7	-1	-1	-1	-1
$\chi_{18}^{(35)}$	2	2	2	-2	-2	-2	6	6	6	-6	-6	-6	-1	-1	-1	1	1	1	.	.	.	.
$\chi_{18}^{(36)}$	1	1	1	-1	-1	-1	-3	-3	-3	3	3	3	7	7	7	-7	-7	-7	-1	-1	-1	1
$\chi_{18}^{(37)}$	2	2	2	-2	-2	-2	6	6	6	-6	-6	-6	-1	-1	-1	1	1	1	.	.	.	.
$\chi_{18}^{(38)}$	1	1	1	-1	-1	-1	-3	-3	-3	3	3	3	7	7	7	-7	-7	-7	-1	-1	-1	1
$\chi_{18}^{(39)}$	2	/O	O	O	2	/O	B	/B	6	6	B	/B	-A	-/A	-1	-1	-A	-/A	.	.	.	.
$\chi_{18}^{(40)}$	2	O	/O	/O	2	O	/B	B	6	6	/B	B	-/A	-A	-1	-1	-/A	-A	.	.	.	.
$\chi_{18}^{(41)}$	1	A	/A	/A	1	A	-/N	-N	-3	-3	-/N	-N	-S	-/S	7	7	-S	-/S	-1	-A	-/A	-/A
$\chi_{18}^{(42)}$	1	/A	A	A	1	/A	-N	-/N	-3	-3	-N	-/N	-S	-S	7	7	-/S	-S	-1	-/A	-A	-A
$\chi_{18}^{(43)}$	2	/O	O	O	2	/O	B	/B	6	6	B	/B	-A	-/A	-1	-1	-A	-/A	.	.	.	.
$\chi_{18}^{(44)}$	2	O	/O	/O	2	O	/B	B	6	6	/B	B	-/A	-A	-1	-1	-/A	-A	.	.	.	.
$\chi_{18}^{(45)}$	1	A	/A	/A	1	A	-/N	-N	-3	-3	-/N	-N	-S	-/S	7	7	-S	-/S	-1	-A	-/A	-/A
$\chi_{18}^{(46)}$	1	/A	A	A	1	/A	-N	-/N	-3	-3	-N	-/N	-S	-S	7	7	-/S	-S	-1	-/A	-A	-A
$\chi_{18}^{(47)}$	2	/O	O	-O	-2	-/O	B	/B	6	-6	-B	-/B	-A	-/A	-1	1	A	/A	.	.	.	.
$\chi_{18}^{(48)}$	2	O	/O	-/O	-2	-O	/B	B	6	-6	-/B	-B	-/A	-A	-1	1	/A	A	.	.	.	.
$\chi_{18}^{(49)}$	1	A	/A	-/A	-1	-A	-/N	-N	-3	3	/N	N	-S	-/S	7	-7	S	/S	-1	-A	-/A	/A
$\chi_{18}^{(50)}$	1	/A	A	-A	-1	-/A	-N	-/N	-3	3	N	/N	-/S	-S	7	-7	/S	S	-1	-/A	-A	A
$\chi_{18}^{(51)}$	2	/O	O	-O	-2	-/O	B	/B	6	-6	-B	-/B	-A	-/A	-1	1	A	/A	.	.	.	.
$\chi_{18}^{(52)}$	2	O	/O	-/O	-2	-O	/B	B	6	-6	-/B	-B	-/A	-A	-1	1	/A	A	.	.	.	.
$\chi_{18}^{(53)}$	1	A	/A	-/A	-1	-A	-/N	-N	-3	3	/N	N	-S	-/S	7	-7	S	/S	-1	-A	-/A	/A
$\chi_{18}^{(54)}$	1	/A	A	-A	-1	-/A	-N	-/N	-3	3	N	/N	-/S	-S	7	-7	/S	S	-1	-/A	-A	A
$\chi_{18}^{(55)}$	-2	-2	-2	-2	-2	-2	2	2	2	2	2	2	4	4	4	4	4	4	.	.	.	.
$\chi_{18}^{(56)}$	-2	-2	-2	-2	-2	-2	2	2	2	2	2	2	4	4	4	4	4	4	.	.	.	.
$\chi_{18}^{(57)}$	-2	-2	-2	2	2	2	2	2	2	-2	-2	-2	4	4	4	-4	-4	-4	.	.	.	.
$\chi_{18}^{(58)}$	-2	-2	-2	2	2	2	2	2	2	-2	-2	-2	4	4	4	-4	-4	-4	.	.	.	.
$\chi_{18}^{(59)}$	1	1	1	1	1	1	-7	-7	-7	-7	-7	-7	4	4	4	4	4	4	1	1	1	1
$\chi_{18}^{(60)}$	1	1	1	-1	-1	-1	-7	-7	-7	7	7	7	4	4	4	-4	-4	-4	1	1	1	-1
$\chi_{18}^{(61)}$	-2	-/O	-O	-O	-2	-/O	/O	O	2	2	/O	O	/M	M	4	4	/M	M	.	.	.	.
$\chi_{18}^{(62)}$	-2	-O	-/O	-/O	-2	-O	O	/O	2	2	O	/O	M	/M	4	4	M	/M	.	.	.	.
$\chi_{18}^{(63)}$	-2	-/O	-O	-O	-2	-/O	/O	O	2	2	/O	O	/M	M	4	4	/M	M
$\chi_{18}^{(64)}$	-2	-O	-/O	-/O	-2	-O	O	/O	2	2	O	/O	M	/M	4	4	M	/M
$\chi_{18}^{(65)}$	-2	-/O	-O	O	2	/O	/O	O	2	-2	-/O	-O	/M	M	4	-4	-/M	-M

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$\chi_{18}^{(66)}$	-2	-O	/O	/O	2	O	O	/O	2	-2	-O	/O	M	/M	4	-4	-M	/M
$\chi_{18}^{(67)}$	-2	/O	-O	O	2	/O	/O	O	2	-2	/O	-O	/M	M	4	-4	/M	-M
$\chi_{18}^{(68)}$	-2	-O	/O	/O	2	O	O	/O	2	-2	-O	/O	M	/M	4	-4	-M	/M
$\chi_{18}^{(69)}$	1	A	/A	/A	1	A	S	/S	-7	-7	S	/S	/M	M	4	4	/M	M	1	A	/A	/A
$\chi_{18}^{(70)}$	1	/A	A	A	1	/A	/S	S	-7	-7	/S	S	M	/M	4	4	M	/M	1	/A	A	A
$\chi_{18}^{(71)}$	1	A	/A	-A	-1	-A	S	/S	-7	7	-S	-/S	/M	M	4	-4	/M	-M	1	A	/A	-/A
$\chi_{18}^{(72)}$	1	/A	A	-A	-1	-A	/S	S	-7	7	-/S	-S	M	/M	4	-4	-M	/M	1	/A	A	-A
$\chi_{18}^{(73)}$	2	2	2	2	2	2	6	6	6	6	6	6	8	8	8	8	8	8	.	.	.	.
$\chi_{18}^{(74)}$	2	2	2	2	2	2	6	6	6	6	6	6	8	8	8	8	8	8	.	.	.	.
$\chi_{18}^{(75)}$	2	2	2	-2	-2	-2	6	6	6	-6	-6	-6	8	8	8	-8	-8	-8	.	.	.	.
$\chi_{18}^{(76)}$	2	2	2	-2	-2	-2	6	6	6	-6	-6	-6	8	8	8	-8	-8	-8	.	.	.	.
$\chi_{18}^{(77)}$	2	/O	O	O	2	/O	B	/B	6	6	B	/B	-T	-/T	8	8	-T	/T	.	.	.	.
$\chi_{18}^{(78)}$	2	O	/O	/O	2	O	/B	B	6	6	/B	B	-/T	-T	8	8	/T	-T	.	.	.	.
$\chi_{18}^{(79)}$	2	/O	O	O	2	/O	B	/B	6	6	B	/B	-T	-/T	8	8	-T	/T	.	.	.	.
$\chi_{18}^{(80)}$	2	O	/O	/O	2	O	/B	B	6	6	/B	B	-/T	-T	8	8	/T	-T	.	.	.	.
$\chi_{18}^{(81)}$	2	/O	O	-O	-2	-/O	B	/B	6	-6	-B	-/B	-T	-/T	8	-8	T	/T	.	.	.	.
$\chi_{18}^{(82)}$	2	O	/O	-/O	-2	-O	/B	B	6	-6	-/B	-B	-/T	-T	8	-8	/T	T	.	.	.	.
$\chi_{18}^{(83)}$	2	/O	O	-O	-2	-/O	B	/B	6	-6	-B	-/B	-T	-/T	8	-8	T	/T	.	.	.	.
$\chi_{18}^{(84)}$	2	O	/O	-/O	-2	-O	/B	B	6	-6	-/B	-B	-/T	-T	8	-8	/T	T	.	.	.	.
$\chi_{18}^{(85)}$	-1	-1	-1	-1	-1	-1	3	3	3	3	3	3	-10	-10	-10	-10	-10	-10	1	1	1	1
$\chi_{18}^{(86)}$	-1	-1	-1	-1	-1	-1	3	3	3	3	3	3	-10	-10	-10	-10	-10	-10	1	1	1	1
$\chi_{18}^{(87)}$	-1	-1	-1	1	1	1	3	3	3	-3	-3	-3	-10	-10	-10	10	10	10	1	1	1	-1
$\chi_{18}^{(88)}$	-1	-1	-1	1	1	1	3	3	3	-3	-3	-3	-10	-10	-10	10	10	10	1	1	1	-1
$\chi_{18}^{(89)}$	-1	-A	-A	-A	-1	-A	/N	N	3	3	/N	N	-C	-/C	-10	-10	-C	/C	1	A	/A	/A
$\chi_{18}^{(90)}$	-1	-A	-A	-A	-1	-A	N	/N	3	3	N	/N	-/C	-C	-10	-10	-/C	-C	1	/A	A	A
$\chi_{18}^{(91)}$	-1	-A	-A	-A	-1	-A	/N	N	3	3	/N	N	-C	-/C	-10	-10	-C	/C	1	A	/A	/A
$\chi_{18}^{(92)}$	-1	-A	-A	-A	-1	-A	N	/N	3	3	N	/N	-/C	-C	-10	-10	-/C	-C	1	/A	A	A
$\chi_{18}^{(93)}$	-1	-A	-A	/A	1	A	/N	N	3	-3	-/N	-N	-C	-/C	-10	10	C	/C	1	A	/A	-/A
$\chi_{18}^{(94)}$	-1	-A	-A	A	1	/A	N	/N	3	-3	-N	-/N	-/C	-C	-10	10	/C	C	1	/A	A	-A
$\chi_{18}^{(95)}$	-1	-A	-A	/A	1	A	/N	N	3	-3	-/N	-N	-C	-/C	-10	10	C	/C	1	A	/A	-/A
$\chi_{18}^{(96)}$	-1	-A	-A	A	1	/A	N	/N	3	-3	-N	-/N	-/C	-C	-10	10	/C	C	1	/A	A	-A
$\chi_{18}^{(97)}$	2	2	2	2	2	2	6	6	6	6	6	6	-4	-4	-4	-4	-4	-4	.	.	.	.
$\chi_{18}^{(98)}$	2	2	2	2	2	2	6	6	6	6	6	6	-4	-4	-4	-4	-4	-4	.	.	.	.
$\chi_{18}^{(99)}$	2	2	2	-2	-2	-2	6	6	6	-6	-6	-6	-4	-4	-4	4	4	4	.	.	.	.
$\chi_{18}^{(100)}$	2	2	2	-2	-2	-2	6	6	6	-6	-6	-6	-4	-4	-4	4	4	4	.	.	.	.
$\chi_{18}^{(101)}$	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	12	12	12	12	12	12	1	1	1	1
$\chi_{18}^{(102)}$	-3	-3	-3	3	3	3	-3	-3	-3	3	3	3	12	12	12	-12	-12	-12	1	1	1	-1
$\chi_{18}^{(103)}$	2	/O	O	O	2	/O	B	/B	6	6	B	/B	-/M	-M	-4	-4	-/M	-M	.	.	.	.
$\chi_{18}^{(104)}$	2	O	/O	/O	2	O	/B	B	6	6	/B	B	-M	-/M	-4	-4	-M	/M	.	.	.	.
$\chi_{18}^{(105)}$	2	/O	O	O	2	/O	B	/B	6	6	B	/B	-/M	-M	-4	-4	-/M	-M	.	.	.	.
$\chi_{18}^{(106)}$	2	O	/O	/O	2	O	/B	B	6	6	/B	B	-M	-/M	-4	-4	-M	/M	.	.	.	.
$\chi_{18}^{(107)}$	2	/O	O	-O	-2	-/O	B	/B	6	-6	-B	-/B	-/M	-M	-4	4	/M	M	.	.	.	.
$\chi_{18}^{(108)}$	2	O	/O	-/O	-2	-O	/B	B	6	-6	-/B	-B	-M	-/M	-4	4	M	/M
$\chi_{18}^{(109)}$	2	/O	O	-O	-2	-/O	B	/B	6	-6	-B	-/B	-/M	-M	-4	4	/M	M
$\chi_{18}^{(110)}$	2	O	/O	-/O	-2	-O	/B	B	6	-6	-/B	-B	-M	-/M	-4	4	M	/M

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$\chi_{18}^{(111)}$	-3	-/N	-N	-N	-3	-/N	-/N	-N	-3	-3	-/N	-N	U	/U	12	12	U	/U	1	A	/A	/A
$\chi_{18}^{(112)}$	-3	-N	-/N	-/N	-3	-N	-N	-/N	-3	-3	-N	-/N	/U	U	12	12	/U	U	1	/A	A	A
$\chi_{18}^{(113)}$	-3	-/N	-N	N	3	/N	-/N	-N	-3	3	/N	N	U	/U	12	-12	-U	-/U	1	A	/A	-/A
$\chi_{18}^{(114)}$	-3	-N	-/N	/N	3	N	-N	-/N	-3	3	N	/N	/U	U	12	-12	-/U	-U	1	/A	A	-A
$\chi_{18}^{(115)}$	.	.	.	.	.	.	-8	-8	-8	-8	-8	-8	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(116)}$	.	.	.	.	.	.	-8	-8	-8	-8	-8	-8	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(117)}$	.	.	.	.	.	.	-8	-8	-8	8	8	8	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(118)}$	.	.	.	.	.	.	-8	-8	-8	8	8	8	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(119)}$	.	.	.	.	.	.	T	/T	-8	-8	T	/T	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(120)}$	.	.	.	.	.	.	/T	T	-8	-8	/T	T	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(121)}$	.	.	.	.	.	.	T	/T	-8	-8	T	/T	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(122)}$	.	.	.	.	.	.	/T	T	-8	-8	/T	T	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(123)}$	.	.	.	.	.	.	T	/T	-8	8	-T	-/T	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(124)}$	.	.	.	.	.	.	/T	T	-8	8	-/T	-T	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(125)}$	.	.	.	.	.	.	T	/T	-8	8	-T	-/T	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(126)}$	.	.	.	.	.	.	/T	T	-8	8	-/T	-T	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(127)}$	2	2	2	2	2	2	-10	-10	-10	-10	-10	-10	-16	-16	-16	-16	-16	-16	.	.	.	.
$\chi_{18}^{(128)}$	2	2	2	-2	-2	-2	-10	-10	-10	10	10	10	-16	-16	-16	16	16	16	.	.	.	.
$\chi_{18}^{(129)}$	2	/O	O	O	2	/O	-C	-/C	-10	-10	-C	-/C	Q	/Q	-16	-16	Q	/Q	.	.	.	.
$\chi_{18}^{(130)}$	2	O	/O	/O	2	O	-/C	-C	-10	-10	-/C	-C	/Q	Q	-16	-16	/Q	Q	.	.	.	.
$\chi_{18}^{(131)}$	2	/O	O	-O	-2	-/O	-C	-/C	-10	10	C	/C	Q	/Q	-16	16	-Q	-/Q	.	.	.	.
$\chi_{18}^{(132)}$	2	O	/O	-/O	-2	-O	-/C	-C	-10	10	/C	C	/Q	Q	-16	16	-/Q	-Q	.	.	.	.
$\chi_{18}^{(133)}$	.	.	.	.	.	.	.	.	.	.	.	.	9	9	9	9	9	9	.	.	.	.
$\chi_{18}^{(134)}$	.	.	.	.	.	.	.	.	.	.	.	.	9	9	9	9	9	9	.	.	.	.
$\chi_{18}^{(135)}$	.	.	.	.	.	.	.	.	.	.	.	.	9	9	9	-9	-9	-9	.	.	.	.
$\chi_{18}^{(136)}$	.	.	.	.	.	.	.	.	.	.	.	.	9	9	9	-9	-9	-9	.	.	.	.
$\chi_{18}^{(137)}$	.	.	.	.	.	.	.	.	.	.	.	.	R	/R	9	9	R	/R	.	.	.	.
$\chi_{18}^{(138)}$	.	.	.	.	.	.	.	.	.	.	.	.	/R	R	9	9	/R	R	.	.	.	.
$\chi_{18}^{(139)}$	.	.	.	.	.	.	.	.	.	.	.	.	R	/R	9	9	R	/R	.	.	.	.
$\chi_{18}^{(140)}$	.	.	.	.	.	.	.	.	.	.	.	.	/R	R	9	9	/R	R	.	.	.	.
$\chi_{18}^{(141)}$	.	.	.	.	.	.	.	.	.	.	.	.	R	/R	9	-9	-R	-/R	.	.	.	.
$\chi_{18}^{(142)}$	.	.	.	.	.	.	.	.	.	.	.	.	/R	R	9	-9	-/R	-R	.	.	.	.
$\chi_{18}^{(143)}$	.	.	.	.	.	.	.	.	.	.	.	.	R	/R	9	-9	-R	-/R	.	.	.	.
$\chi_{18}^{(144)}$	.	.	.	.	.	.	.	.	.	.	.	.	/R	R	9	-9	-/R	-R	.	.	.	.
$\chi_{18}^{(145)}$	-3	-3	-3	-3	-3	-3	9	9	9	9	9	9	-6	-6	-6	-6	-6	-6	-1	-1	-1	-1
$\chi_{18}^{(146)}$	-3	-3	-3	3	3	3	9	9	9	-9	-9	-9	-6	-6	-6	6	6	6	-1	-1	-1	1
$\chi_{18}^{(147)}$	-3	-/N	-N	-N	-3	-/N	R	/R	9	9	R	/R	-B	-/B	-6	-6	-B	-/B	-1	-A	-/A	-/A
$\chi_{18}^{(148)}$	-3	-N	-/N	-/N	-3	-N	/R	R	9	9	/R	R	-/B	-B	-6	-6	-/B	-B	-1	-/A	-A	-A
$\chi_{18}^{(149)}$	-3	-/N	-N	N	3	/N	R	/R	9	-9	-R	-/R	-B	-/B	-6	6	B	/B	-1	-A	-/A	/A
$\chi_{18}^{(150)}$	-3	-N	-/N	/N	3	N	/R	R	9	-9	-/R	-R	-/B	-B	-6	6	/B	B	-1	-/A	-A	A

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$\chi_{18}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{18}^{(2)}$	-1	-1	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	-1	-1	1	1	1	1
$\chi_{18}^{(3)}$	-1	-1	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	-1	-1	-1	1
$\chi_{18}^{(4)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	1
$\chi_{18}^{(5)}$	-1	-A	1	A	/A	-/A	-1	-A	1	A	/A	-/A	-1	-A	-/A	-1	-A	A	/A	1
$\chi_{18}^{(6)}$	-1	-/A	1	/A	A	-A	-1	-/A	1	/A	A	-A	-1	-/A	-A	-1	-/A	/A	A	1
$\chi_{18}^{(7)}$	-1	-A	1	A	/A	-/A	-1	-A	1	A	/A	-/A	-1	-A	/A	1	A	-A	-/A	-1
$\chi_{18}^{(8)}$	-1	-/A	1	/A	A	-A	-1	-/A	1	/A	A	-A	-1	-/A	A	1	/A	-/A	-A	-1
$\chi_{18}^{(9)}$	1	A	1	A	/A	/A	1	A	1	A	/A	/A	1	A	-/A	-1	-A	-A	-/A	-1
$\chi_{18}^{(10)}$	1	/A	1	/A	A	A	1	/A	1	/A	A	A	1	/A	-A	-1	-/A	-/A	-A	-1
$\chi_{18}^{(11)}$	1	A	1	A	/A	/A	1	A	1	A	/A	/A	1	A	/A	1	A	A	/A	1
$\chi_{18}^{(12)}$	1	/A	1	/A	A	A	1	/A	1	/A	A	A	1	/A	A	1	/A	/A	A	1
$\chi_{18}^{(13)}$	-1	-1	2	2	2	2	2	2	-2	-2	-2	-2	-2	-2	1	1	1	1	1	1
$\chi_{18}^{(14)}$	-1	-1	2	2	2	2	2	2	-2	-2	-2	-2	-2	-2	-1	-1	-1	-1	-1	-1
$\chi_{18}^{(15)}$	1	1	2	2	2	-2	-2	-2	-2	-2	-2	2	2	2	1	1	1	-1	-1	-1
$\chi_{18}^{(16)}$	1	1	2	2	2	-2	-2	-2	-2	-2	-2	2	2	2	-1	-1	-1	1	1	1
$\chi_{18}^{(17)}$	-1	-A	2	/O	O	O	2	/O	-2	-/O	-O	-O	-2	-/O	/A	1	A	A	/A	1
$\chi_{18}^{(18)}$	-1	-/A	2	O	/O	/O	2	O	-2	-O	-/O	-/O	-2	-O	A	1	/A	/A	A	1
$\chi_{18}^{(19)}$	-1	-A	2	/O	O	O	2	/O	-2	-/O	-O	-O	-2	-/O	-/A	-1	-A	-A	-/A	-1
$\chi_{18}^{(20)}$	-1	-/A	2	O	/O	/O	2	O	-2	-O	-/O	-/O	-2	-O	-A	-1	-/A	-/A	-A	-1
$\chi_{18}^{(21)}$	1	A	2	/O	O	-O	-2	-/O	-2	-/O	-O	O	2	/O	/A	1	A	-A	-/A	-1
$\chi_{18}^{(22)}$	1	/A	2	O	/O	-/O	-2	-O	-2	-O	-/O	/O	2	O	A	1	/A	-/A	-A	-1
$\chi_{18}^{(23)}$	1	A	2	/O	O	-O	-2	-/O	-2	-/O	-O	O	2	/O	-/A	-1	-A	A	/A	1
$\chi_{18}^{(24)}$	1	/A	2	O	/O	-/O	-2	-O	-2	-O	-/O	/O	2	O	-A	-1	-/A	/A	A	1
$\chi_{18}^{(25)}$	-1	-1	2	2	2	2	2	2	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(26)}$	1	1	2	2	2	-2	-2	-2	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(27)}$	-1	-A	2	/O	O	O	2	/O	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(28)}$	-1	-/A	2	O	/O	/O	2	O	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(29)}$	1	A	2	/O	O	-O	-2	-/O	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(30)}$	1	/A	2	O	/O	-/O	-2	-O	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(31)}$	.	.	3	3	3	3	3	3	2	2	2	2	2	2	.	.	.	.	.	.
$\chi_{18}^{(32)}$	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	.	.	.	.	.	.
$\chi_{18}^{(33)}$	.	.	3	3	3	3	3	3	2	2	2	2	2	2	.	.	.	.	.	.
$\chi_{18}^{(34)}$	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	.	.	.	.	.	.
$\chi_{18}^{(35)}$	.	.	3	3	3	-3	-3	-3	2	2	2	-2	-2	-2	.	.	.	.	.	.
$\chi_{18}^{(36)}$	1	1	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	.	.	.	.	.	.
$\chi_{18}^{(37)}$	.	.	3	3	3	-3	-3	-3	2	2	2	-2	-2	-2	.	.	.	.	.	.
$\chi_{18}^{(38)}$	1	1	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	.	.	.	.	.	.
$\chi_{18}^{(39)}$	.	.	3	/N	N	N	3	/N	2	/O	O	O	2	/O	.	.	.	.	.	.
$\chi_{18}^{(40)}$	.	.	3	N	/N	/N	3	N	2	O	/O	/O	2	O	.	.	.	.	.	.
$\chi_{18}^{(41)}$	-1	-A	-1	-A	-/A	-/A	-1	-A	1	A	/A	/A	1	A	.	.	.	.	.	.
$\chi_{18}^{(42)}$	-1	-/A	-1	-/A	-A	-A	-1	-/A	1	/A	A	A	1	/A
$\chi_{18}^{(43)}$.	.	3	/N	N	N	3	/N	2	/O	O	O	2	/O
$\chi_{18}^{(44)}$.	.	3	N	/N	/N	3	N	2	O	/O	/O	2	O
$\chi_{18}^{(45)}$	-1	-A	-1	-A	-/A	-/A	-1	-A	1	A	/A	/A	1	A

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$\chi_{18}^{(46)}$	-1	-/A	-1	-/A	-A	-A	-1	-/A	1	/A	A	A	1	/A
$\chi_{18}^{(47)}$.	.	3	/N	N	-N	-3	-/N	2	/O	O	-O	-2	-/O
$\chi_{18}^{(48)}$.	.	3	N	/N	-/N	-3	-N	2	O	/O	-/O	-2	-O
$\chi_{18}^{(49)}$	1	A	-1	-A	-/A	/A	1	A	1	A	/A	-/A	-1	-A
$\chi_{18}^{(50)}$	1	/A	-1	-/A	-A	A	1	/A	1	/A	A	-A	-1	-/A	.	.	.	.	.	.
$\chi_{18}^{(51)}$	.	.	3	/N	N	-N	-3	-/N	2	/O	O	-O	-2	-/O	.	.	.	.	.	.
$\chi_{18}^{(52)}$	.	.	3	N	/N	-/N	-3	-N	2	O	/O	-/O	-2	-O	.	.	.	.	.	.
$\chi_{18}^{(53)}$	1	A	-1	-A	-/A	/A	1	A	1	A	/A	-/A	-1	-A	.	.	.	.	.	.
$\chi_{18}^{(54)}$	1	/A	-1	-/A	-A	A	1	/A	1	/A	A	-A	-1	-/A	.	.	.	.	.	.
$\chi_{18}^{(55)}$	.	.	.	.	.	.	.	.	1	1	1	1	1	1	.	.	.	.	.	.
$\chi_{18}^{(56)}$	.	.	.	.	.	.	.	.	1	1	1	1	1	1	.	.	.	.	.	.
$\chi_{18}^{(57)}$	.	.	.	.	.	.	.	.	1	1	1	-1	-1	-1	.	.	.	.	.	.
$\chi_{18}^{(58)}$	.	.	.	.	.	.	.	.	1	1	1	-1	-1	-1	.	.	.	.	.	.
$\chi_{18}^{(59)}$	1	1	4	4	4	4	4	4	-2	-2	-2	-2	-2	-2	.	.	.	.	.	.
$\chi_{18}^{(60)}$	-1	-1	4	4	4	-4	-4	-4	-2	-2	-2	2	2	2	.	.	.	.	.	.
$\chi_{18}^{(61)}$	.	.	.	.	.	.	.	.	1	A	/A	/A	1	A	.	.	.	.	.	.
$\chi_{18}^{(62)}$	.	.	.	.	.	.	.	.	1	/A	A	A	1	/A	.	.	.	.	.	.
$\chi_{18}^{(63)}$	.	.	.	.	.	.	.	.	1	A	/A	/A	1	A	.	.	.	.	.	.
$\chi_{18}^{(64)}$	.	.	.	.	.	.	.	.	1	/A	A	A	1	/A	.	.	.	.	.	.
$\chi_{18}^{(65)}$	.	.	.	.	.	.	.	.	1	A	/A	-/A	-1	-A	.	.	.	.	.	.
$\chi_{18}^{(66)}$	.	.	.	.	.	.	.	.	1	/A	A	-A	-1	-/A	.	.	.	.	.	.
$\chi_{18}^{(67)}$	.	.	.	.	.	.	.	.	1	A	/A	-/A	-1	-A	.	.	.	.	.	.
$\chi_{18}^{(68)}$	.	.	.	.	.	.	.	.	1	/A	A	-A	-1	-/A	.	.	.	.	.	.
$\chi_{18}^{(69)}$	1	A	4	/M	M	M	4	/M	-2	-/O	-O	-O	-2	-/O	.	.	.	.	.	.
$\chi_{18}^{(70)}$	1	/A	4	M	/M	/M	4	M	-2	-O	-/O	-/O	-2	-O	.	.	.	.	.	.
$\chi_{18}^{(71)}$	-1	-A	4	/M	M	-M	-4	-/M	-2	-/O	-O	O	2	/O	.	.	.	.	.	.
$\chi_{18}^{(72)}$	-1	-/A	4	M	/M	-/M	-4	-M	-2	-O	-/O	/O	2	O	.	.	.	.	.	.
$\chi_{18}^{(73)}$	.	.	.	.	.	.	.	.	-1	-1	-1	-1	-1	-1	1	1	1	1	1	-1
$\chi_{18}^{(74)}$	.	.	.	.	.	.	.	.	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_{18}^{(75)}$	.	.	.	.	.	.	.	.	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1
$\chi_{18}^{(76)}$	.	.	.	.	.	.	.	.	-1	-1	-1	1	1	1	-1	-1	-1	1	1	-1
$\chi_{18}^{(77)}$	.	.	.	.	.	.	.	.	-1	-A	-/A	-/A	-1	-A	/A	1	A	A	/A	1
$\chi_{18}^{(78)}$	.	.	.	.	.	.	.	.	-1	-/A	-A	-A	-1	-/A	A	1	/A	/A	A	1
$\chi_{18}^{(79)}$	.	.	.	.	.	.	.	.	-1	-A	-/A	-/A	-1	-A	-/A	-1	-A	-A	-/A	-1
$\chi_{18}^{(80)}$	.	.	.	.	.	.	.	.	-1	-/A	-A	-A	-1	-/A	-A	-1	-/A	-A	-A	-1
$\chi_{18}^{(81)}$	.	.	.	.	.	.	.	.	-1	-A	-/A	/A	1	A	/A	1	A	-A	-/A	-1
$\chi_{18}^{(82)}$	.	.	.	.	.	.	.	.	-1	-/A	-A	A	1	/A	A	1	/A	-/A	-A	-1
$\chi_{18}^{(83)}$	.	.	.	.	.	.	.	.	-1	-A	-/A	/A	1	A	-/A	-1	-A	A	/A	1
$\chi_{18}^{(84)}$	.	.	.	.	.	.	.	.	-1	-/A	-A	A	1	/A	-A	-1	-/A	/A	A	1
$\chi_{18}^{(85)}$	1	1	-2	-2	-2	-2	-2	-2	-1	-1	-1	-1	-1	-1	.	.	.	.	.	.
$\chi_{18}^{(86)}$	1	1	-2	-2	-2	-2	-2	-2	-1	-1	-1	-1	-1	-1	.	.	.	.	.	.
$\chi_{18}^{(87)}$	-1	-1	-2	-2	-2	2	2	2	-1	-1	-1	1	1	1
$\chi_{18}^{(88)}$	-1	-1	-2	-2	-2	2	2	2	-1	-1	-1	1	1	1
$\chi_{18}^{(89)}$	1	A	-2	-/O	-O	-O	-2	-/O	-1	-A	-/A	-/A	-1	-A
$\chi_{18}^{(90)}$	1	/A	-2	-O	-/O	-/O	-2	-O	-1	-/A	-A	-A	-1	-/A

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$\chi_{18}^{(91)}$	1	A	-2	-/O	-O	-O	-2	-/O	-1	-A	-/A	-/A	-1	-A	
$\chi_{18}^{(92)}$	1	/A	-2	-O	-/O	-/O	-2	-O	-1	-/A	-A	-A	-1	-/A	
$\chi_{18}^{(93)}$	-1	-A	-2	-/O	-O	O	2	/O	-1	-A	-/A	/A	1	A	
$\chi_{18}^{(94)}$	-1	-/A	-2	-O	-/O	/O	2	O	-1	-/A	-A	A	1	/A	
$\chi_{18}^{(95)}$	-1	-A	-2	-/O	-O	O	2	/O	-1	-A	-/A	/A	1	A	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(96)}$	-1	-/A	-2	-O	-/O	/O	2	O	-1	-/A	-A	A	1	/A	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(97)}$	.	.	.	.	.	.	.	.	-1	-1	-1	-1	-1	-1	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(98)}$	.	.	.	.	.	.	.	.	-1	-1	-1	-1	-1	-1	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(99)}$	.	.	.	.	.	.	.	.	-1	-1	-1	1	1	1	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(100)}$	.	.	.	.	.	.	.	.	-1	-1	-1	1	1	1	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(101)}$	1	1	4	4	4	4	4	4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(102)}$	-1	-1	4	4	4	-4	-4	-4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(103)}$	.	.	.	.	.	.	.	.	-1	-A	-/A	-/A	-1	-A	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(104)}$	.	.	.	.	.	.	.	.	-1	-/A	-A	-A	-1	-/A	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(105)}$	.	.	.	.	.	.	.	.	-1	-A	-/A	-/A	-1	-A	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(106)}$	.	.	.	.	.	.	.	.	-1	-/A	-A	-A	-1	-/A	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(107)}$	.	.	.	.	.	.	.	.	-1	-A	-/A	/A	1	A	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(108)}$	.	.	.	.	.	.	.	.	-1	-/A	-A	A	1	/A	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(109)}$	.	.	.	.	.	.	.	.	-1	-A	-/A	/A	1	A	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(110)}$	.	.	.	.	.	.	.	.	-1	-/A	-A	A	1	/A	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(111)}$	1	A	4	/M	M	M	4	/M	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(112)}$	1	/A	4	M	/M	/M	4	M	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(113)}$	-1	-A	4	/M	M	-M	-4	-/M	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(114)}$	-1	-/A	4	M	/M	-/M	-4	-M	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(115)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_{18}^{(116)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1	1	1	1	1	-1	-1	-1	-1	-1
$\chi_{18}^{(117)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	-1	-1	1	1	1	-1	-1	-1	-1	-1
$\chi_{18}^{(118)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_{18}^{(119)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-/A	-1	-A	-A	-/A	-1	-A	-/A	-1	-1	-1
$\chi_{18}^{(120)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-A	-1	-/A	-/A	-A	-1	-/A	-A	-1	-1	-1
$\chi_{18}^{(121)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	/A	1	A	A	/A	1	-A	-/A	-1	-1	-1
$\chi_{18}^{(122)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	A	1	/A	/A	A	1	-/A	-A	-1	-1	-1
$\chi_{18}^{(123)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-/A	-1	-A	A	/A	1	-A	-/A	-1	-1	-1
$\chi_{18}^{(124)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-A	-1	-/A	/A	A	1	-/A	-A	-1	-1	-1
$\chi_{18}^{(125)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	/A	1	A	-A	-/A	-1	-A	-/A	-1	-1	-1
$\chi_{18}^{(126)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	A	1	/A	-/A	-A	-1	-/A	-A	-1	-1	-1
$\chi_{18}^{(127)}$	.	.	.	.	.	.	.	.	2	2	2	2	2	2	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(128)}$	.	.	.	.	.	.	.	.	2	2	2	-2	-2	-2	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(129)}$	.	.	.	.	.	.	.	.	2	/O	O	O	2	/O	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(130)}$	.	.	.	.	.	.	.	.	2	O	/O	/O	2	O	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(131)}$	.	.	.	.	.	.	.	.	2	/O	O	-O	-2	-/O	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(132)}$	.	.	.	.	.	.	.	.	2	O	/O	-/O	-2	-O	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(133)}$.	.	-3	-3	-3	-3	-3	-3	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	
$\chi_{18}^{(134)}$.	.	-3	-3	-3	-3	-3	-3	1	1	1	1	1	1	1	1	1	1	1	
$\chi_{18}^{(135)}$.	.	-3	-3	-3	3	3	3	-1	-1	-1	1	1	1	1	1	1	1	1	

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$\chi_{18}^{(136)}$.	.	-3	-3	-3	3	3	3	1	1	1	-1	-1	-1	1	1	1
$\chi_{18}^{(137)}$.	.	-3	-N	-N	-N	-3	-/N	-/A	-1	-A	-A	-/A	-1	A	/A	1
$\chi_{18}^{(138)}$.	.	-3	-N	-/N	-/N	-3	-N	-A	-1	-/A	-/A	-A	-1	/A	A	1
$\chi_{18}^{(139)}$.	.	-3	-/N	-N	-N	-3	-/N	/A	1	A	A	/A	1	A	/A	1
$\chi_{18}^{(140)}$.	.	-3	-N	-/N	-/N	-3	-N	A	1	/A	/A	A	1	/A	A	1
$\chi_{18}^{(141)}$.	.	-3	-/N	-N	N	3	/N	-/A	-1	-A	A	/A	1	A	/A	1
$\chi_{18}^{(142)}$.	.	-3	-N	-/N	/N	3	N	-A	-1	-/A	/A	A	1	/A	A	1
$\chi_{18}^{(143)}$.	.	-3	-/N	-N	N	3	/N	/A	1	A	-A	-/A	-1	A	/A	1
$\chi_{18}^{(144)}$.	.	-3	-N	-/N	/N	3	N	A	1	/A	-/A	-A	-1	/A	A	1
$\chi_{18}^{(145)}$	-1	-1	2	2	2	2	2	2
$\chi_{18}^{(146)}$	1	1	2	2	2	-2	-2	-2
$\chi_{18}^{(147)}$	-1	-A	2	/O	O	O	2	/O
$\chi_{18}^{(148)}$	-1	-/A	2	O	/O	/O	2	O
$\chi_{18}^{(149)}$	1	A	2	/O	O	-O	-2	-/O
$\chi_{18}^{(150)}$	1	/A	2	O	/O	-/O	-2	-O
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$\chi_{18}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
$\chi_{18}^{(2)}$	-1	-1	-1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	-1	
$\chi_{18}^{(3)}$	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	1	
$\chi_{18}^{(4)}$	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	-1	
$\chi_{18}^{(5)}$	-1	-A	-/A	-/A	-1	-A	A	/A	1	-A	-/A	-1	1	A	/A	1	A	/A	-/A	-1	-A	-1	
$\chi_{18}^{(6)}$	-1	-/A	-A	-A	-1	-/A	/A	A	1	-/A	-A	-1	1	/A	A	1	/A	A	-A	-1	-/A	-1	
$\chi_{18}^{(7)}$	-1	-A	-/A	/A	1	A	-A	-/A	-1	A	/A	1	-1	-A	-/A	1	A	/A	-/A	-1	-A	1	
$\chi_{18}^{(8)}$	-1	-/A	-A	A	1	/A	-/A	-A	-1	/A	A	1	-1	-/A	-A	1	/A	A	-A	-1	-/A	1	
$\chi_{18}^{(9)}$	1	A	/A	-/A	-1	-A	-A	-/A	-1	-A	-/A	-1	-1	-A	-/A	1	A	/A	/A	1	A	-1	
$\chi_{18}^{(10)}$	1	/A	A	-A	-1	-/A	-/A	-A	-1	-/A	-A	-1	-1	-/A	-A	1	/A	A	A	1	/A	-1	
$\chi_{18}^{(11)}$	1	A	/A	/A	1	A	A	/A	1	A	/A	1	1	A	/A	1	A	/A	/A	1	A	1	
$\chi_{18}^{(12)}$	1	/A	A	A	1	/A	/A	A	1	/A	A	1	1	/A	A	1	/A	A	A	1	/A	1	
$\chi_{18}^{(13)}$	1	1	1	-1	-1	-1	-1	-1	-1	2	2	2	2	2	2	2	.	.	.	.	.	.
$\chi_{18}^{(14)}$	1	1	1	1	1	1	1	1	1	-2	-2	-2	-2	-2	-2	.	.	.	.	.	.	.
$\chi_{18}^{(15)}$	-1	-1	-1	-1	-1	-1	1	1	1	2	2	2	-2	-2	-2	.	.	.	.	.	.	.
$\chi_{18}^{(16)}$	-1	-1	-1	1	1	1	-1	-1	-1	-2	-2	-2	2	2	2	.	.	.	.	.	.	.
$\chi_{18}^{(17)}$	1	A	/A	-/A	-1	-A	-A	-/A	-1	/O	O	2	2	/O	O	.	.	.	.	.	.	.
$\chi_{18}^{(18)}$	1	/A	A	-A	-1	-/A	-/A	-A	-1	O	/O	2	2	O	/O	.	.	.	.	.	.	.
$\chi_{18}^{(19)}$	1	A	/A	/A	1	A	A	/A	1	-/O	-O	-2	-2	-/O	-O	.	.	.	.	.	.	.
$\chi_{18}^{(20)}$	1	/A	A	A	1	/A	/A	A	1	-O	-/O	-2	-2	-O	-/O	.	.	.	.	.	.	.
$\chi_{18}^{(21)}$	-1	-A	-/A	-/A	-1	-A	A	/A	1	/O	O	2	-2	-/O	-O	.	.	.	.	.	.	.
$\chi_{18}^{(22)}$	-1	-/A	-A	-A	-1	-/A	/A	A	1	O	/O	2	-2	-O	-/O	.	.	.	.	.	.	.
$\chi_{18}^{(23)}$	-1	-A	-/A	/A	1	A	-A	-/A	-1	-/O	-O	-2	2	/O	O	.	.	.	.	.	.	.
$\chi_{18}^{(24)}$	-1	-/A	-A	A	1	/A	-/A	-A	-1	-O	-/O	-2	2	O	/O	.	.	.	.	.	.	.
$\chi_{18}^{(25)}$	1	1	1	1	1	1	.	
$\chi_{18}^{(26)}$	1	1	1	-1	-1	-1	.	
$\chi_{18}^{(27)}$	1	A	/A	/A	1	A	.	
$\chi_{18}^{(28)}$	1	/A	A	A	1	/A	.	
$\chi_{18}^{(29)}$	1	A	/A	-/A	-1	-A	.	
$\chi_{18}^{(30)}$	1	/A	A	-A	-1	-/A	.	

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$\chi_{18}^{(31)}$.	.	.	-1	-1	-1	-1	-1	-1	-2	-2	-2	-2	-2	1
$\chi_{18}^{(32)}$	1	1	1	1	1	1
$\chi_{18}^{(33)}$.	.	.	1	1	1	1	1	1	2	2	2	2	2	-1
$\chi_{18}^{(34)}$	-1	-1	-1	-1	-1	-1
$\chi_{18}^{(35)}$.	.	.	-1	-1	-1	1	1	1	-2	-2	-2	2	2	1
$\chi_{18}^{(36)}$	1	1	1	-1	-1	.	.	.	.	.	1
$\chi_{18}^{(37)}$.	.	.	1	1	1	-1	-1	-1	2	2	2	-2	-2	.	.	.	.	.	-1
$\chi_{18}^{(38)}$	-1	-1	-1	1	1	.	.	.	.	.	-1
$\chi_{18}^{(39)}$.	.	.	-/A	-1	-A	-A	-/A	-1	-/O	-O	-2	-2	-/O	-O	.	.	.	.	1
$\chi_{18}^{(40)}$.	.	.	-A	-1	-/A	-/A	-A	-1	-O	-/O	-2	-2	-O	-/O	.	.	.	.	1
$\chi_{18}^{(41)}$	A	/A	1	1	A	/A	.	.	.	.	1
$\chi_{18}^{(42)}$	/A	A	1	1	/A	A	.	.	.	.	1
$\chi_{18}^{(43)}$.	.	.	/A	1	A	A	/A	1	/O	O	2	2	/O	O	.	.	.	.	-1
$\chi_{18}^{(44)}$.	.	.	A	1	/A	/A	A	1	O	/O	2	2	O	/O	.	.	.	.	-1
$\chi_{18}^{(45)}$	-A	-/A	-1	-1	-A	-/A	.	.	.	.	-1
$\chi_{18}^{(46)}$	-/A	-A	-1	-1	-/A	-A	.	.	.	.	-1
$\chi_{18}^{(47)}$.	.	.	-/A	-1	-A	A	/A	1	-/O	-O	-2	2	/O	O	.	.	.	.	1
$\chi_{18}^{(48)}$.	.	.	-A	-1	-/A	/A	A	1	-O	-/O	-2	2	O	/O	.	.	.	.	1
$\chi_{18}^{(49)}$	A	/A	1	-1	-A	-/A	.	.	.	.	1
$\chi_{18}^{(50)}$	/A	A	1	-1	-/A	-A	.	.	.	.	1
$\chi_{18}^{(51)}$.	.	.	/A	1	A	-A	-/A	-1	/O	O	2	-2	-/O	-O	.	.	.	.	-1
$\chi_{18}^{(52)}$.	.	.	A	1	/A	-/A	-A	-1	O	/O	2	-2	-O	-/O	.	.	.	.	-1
$\chi_{18}^{(53)}$	-A	-/A	-1	1	A	/A	.	.	.	.	-1
$\chi_{18}^{(54)}$	-/A	-A	-1	1	/A	A	.	.	.	.	-1
$\chi_{18}^{(55)}$.	.	.	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	.
$\chi_{18}^{(56)}$.	.	.	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	-1	.
$\chi_{18}^{(57)}$.	.	.	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1	-1	-1	-1	1	.
$\chi_{18}^{(58)}$.	.	.	-1	-1	-1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	1	1	.
$\chi_{18}^{(59)}$	-1	-1	-1	-1	.
$\chi_{18}^{(60)}$	-1	-1	-1	1	.
$\chi_{18}^{(61)}$.	.	.	/A	1	A	A	/A	1	-A	-/A	-1	-1	-A	-/A	-1	-A	-/A	-/A	.
$\chi_{18}^{(62)}$.	.	.	A	1	/A	/A	A	1	-/A	-A	-1	-1	-/A	-A	-1	-/A	-A	-A	.
$\chi_{18}^{(63)}$.	.	.	-/A	-1	-A	-A	-/A	-1	A	/A	1	1	A	/A	-1	-A	-/A	-/A	.
$\chi_{18}^{(64)}$.	.	.	-A	-1	-/A	-/A	-A	-1	/A	A	1	1	/A	A	-1	-/A	-A	-A	.
$\chi_{18}^{(65)}$.	.	.	/A	1	A	-A	-/A	-1	-A	-/A	-1	1	A	/A	-1	-A	-/A	/A	.
$\chi_{18}^{(66)}$.	.	.	A	1	/A	-/A	-A	-1	-/A	-A	-1	1	/A	A	-1	-/A	-A	A	.
$\chi_{18}^{(67)}$.	.	.	-/A	-1	-A	A	/A	1	A	/A	1	-1	-A	-/A	-1	-A	-/A	/A	.
$\chi_{18}^{(68)}$.	.	.	-A	-1	-/A	/A	A	1	/A	A	1	-1	-/A	-A	-1	-/A	-A	A	.
$\chi_{18}^{(69)}$	-1	-A	-/A	-/A	.
$\chi_{18}^{(70)}$	-1	-/A	-A	-A	.
$\chi_{18}^{(71)}$	-1	-A	-/A	/A	.
$\chi_{18}^{(72)}$	-1	-/A	-A	A	.
$\chi_{18}^{(73)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_{18}^{(74)}$	-1	-1	-1	1	1	1	1	1	1
$\chi_{18}^{(75)}$	1	1	1	-1	-1	-1	1	1	1

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$\chi_{18}^{(76)}$	1	1	1	1	1	1	-1	-1	-1
$\chi_{18}^{(77)}$	-1	-A	-/A	-A	-/A	-1	-1	-A	-/A
$\chi_{18}^{(78)}$	-1	-/A	-A	-/A	-A	-1	-1	-/A	-A
$\chi_{18}^{(79)}$	-1	-A	-/A	A	/A	1	1	A	/A
$\chi_{18}^{(80)}$	-1	-/A	-A	/A	A	1	1	/A	A
$\chi_{18}^{(81)}$	1	A	/A	.	.	.	.	.	.	-A	-/A	-1	1	A	/A	.	.	.	.
$\chi_{18}^{(82)}$	1	/A	A	.	.	.	.	.	.	-/A	-A	-1	1	/A	A	.	.	.	.
$\chi_{18}^{(83)}$	1	A	/A	.	.	.	.	.	.	A	/A	1	-1	-A	-/A	.	.	.	.
$\chi_{18}^{(84)}$	1	/A	A	.	.	.	.	.	.	/A	A	1	-1	-/A	-A	.	.	.	.
$\chi_{18}^{(85)}$	.	.	.	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	.	.	.	.
$\chi_{18}^{(86)}$	.	.	.	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	.	.	.	.
$\chi_{18}^{(87)}$	.	.	.	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1	.	.	.	.
$\chi_{18}^{(88)}$	.	.	.	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	.	.	.	.
$\chi_{18}^{(89)}$	.	.	.	/A	1	A	A	/A	1	-A	-/A	-1	-1	-A	-/A	.	.	.	.
$\chi_{18}^{(90)}$	.	.	.	A	1	/A	/A	A	1	-/A	-A	-1	-1	-/A	-A	.	.	.	.
$\chi_{18}^{(91)}$	.	.	.	-/A	-1	-A	-A	-/A	-1	A	/A	1	1	A	/A	.	.	.	.
$\chi_{18}^{(92)}$	.	.	.	-A	-1	-/A	-/A	-A	-1	/A	A	1	1	/A	A	.	.	.	.
$\chi_{18}^{(93)}$	.	.	.	/A	1	A	-A	-/A	-1	-A	-/A	-1	1	A	/A	.	.	.	.
$\chi_{18}^{(94)}$	.	.	.	A	1	/A	-/A	-A	-1	-/A	-A	-1	1	/A	A	.	.	.	.
$\chi_{18}^{(95)}$	.	.	.	-/A	-1	-A	A	/A	1	A	/A	1	-1	-A	-/A	.	.	.	.
$\chi_{18}^{(96)}$	.	.	.	-A	-1	-/A	/A	A	1	/A	A	1	-1	-/A	-A	.	.	.	.
$\chi_{18}^{(97)}$	.	.	.	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	.	.	.	.
$\chi_{18}^{(98)}$	.	.	.	1	1	1	1	1	1	1	1	1	1	1	1	.	.	.	.
$\chi_{18}^{(99)}$	.	.	.	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	.	.	.	.
$\chi_{18}^{(100)}$	.	.	.	1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	.	.	.	.
$\chi_{18}^{(101)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(102)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(103)}$	.	.	.	-/A	-1	-A	-A	-/A	-1	-A	-/A	-1	-1	-A	-/A	.	.	.	.
$\chi_{18}^{(104)}$	.	.	.	-A	-1	-/A	-/A	-A	-1	-/A	-A	-1	-1	-/A	-A	.	.	.	.
$\chi_{18}^{(105)}$	.	.	.	/A	1	A	A	/A	1	A	/A	1	1	A	/A	.	.	.	.
$\chi_{18}^{(106)}$	.	.	.	A	1	/A	/A	A	1	/A	A	1	1	/A	A	.	.	.	.
$\chi_{18}^{(107)}$	.	.	.	-/A	-1	-A	A	/A	1	-A	-/A	-1	1	A	/A	.	.	.	.
$\chi_{18}^{(108)}$	.	.	.	-A	-1	-/A	/A	A	1	-/A	-A	-1	1	/A	A	.	.	.	.
$\chi_{18}^{(109)}$	.	.	.	/A	1	A	-A	-/A	-1	A	/A	1	-1	-A	-/A	.	.	.	.
$\chi_{18}^{(110)}$	.	.	.	A	1	/A	-/A	-A	-1	/A	A	1	-1	-/A	-A	.	.	.	.
$\chi_{18}^{(111)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(112)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(113)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(114)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(115)}$	-1	-1	-1	.	.	.	.	.	.	2	2	2	2	2	2	1	1	1	1
$\chi_{18}^{(116)}$	-1	-1	-1	.	.	.	.	.	.	-2	-2	-2	-2	-2	-2	1	1	1	1
$\chi_{18}^{(117)}$	1	1	1	.	.	.	.	.	.	2	2	2	-2	-2	-2	1	1	1	-1
$\chi_{18}^{(118)}$	1	1	1	.	.	.	.	.	.	-2	-2	-2	2	2	2	1	1	1	-1
$\chi_{18}^{(119)}$	-1	-A	-/A	.	.	.	.	.	.	/O	O	2	2	/O	O	1	A	/A	/A
$\chi_{18}^{(120)}$	-1	-/A	-A	.	.	.	.	.	.	O	/O	2	2	O	/O	1	/A	A	A

	120										130											
$\chi_{18}^{(121)}$	-1	-A	-/A	.	.	.	.	.	.	-/O	-O	-2	-2	-/O	-O	1	A	/A	/A	1	A	.
$\chi_{18}^{(122)}$	-1	-/A	-A	.	.	.	.	.	.	-O	-/O	-2	-2	-O	-/O	1	/A	A	A	1	/A	.
$\chi_{18}^{(123)}$	1	A	/A	.	.	.	.	.	.	/O	O	2	-2	-/O	-O	1	A	/A	-/A	-1	-A	.
$\chi_{18}^{(124)}$	1	/A	A	.	.	.	.	.	.	O	/O	2	-2	-O	-/O	1	/A	A	-A	-1	-/A	.
$\chi_{18}^{(125)}$	1	A	/A	.	.	.	.	.	.	-/O	-O	-2	2	/O	O	1	A	/A	-/A	-1	-A	.
$\chi_{18}^{(126)}$	1	/A	A	.	.	.	.	.	.	-O	-/O	-2	2	O	/O	1	/A	A	-A	-1	-/A	.
$\chi_{18}^{(127)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	-1	-1	-1	-1	-1	.
$\chi_{18}^{(128)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	-1	-1	1	1	1	.
$\chi_{18}^{(129)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	-A	-/A	-/A	-1	-A	.
$\chi_{18}^{(130)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	-/A	-A	-A	-1	-/A	.
$\chi_{18}^{(131)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	-A	-/A	/A	1	A	.
$\chi_{18}^{(132)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	-/A	-A	A	1	/A	.
$\chi_{18}^{(133)}$	1	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
$\chi_{18}^{(134)}$	1	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1
$\chi_{18}^{(135)}$	-1	-1	-1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
$\chi_{18}^{(136)}$	-1	-1	-1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1
$\chi_{18}^{(137)}$	1	A	/A	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
$\chi_{18}^{(138)}$	1	/A	A	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
$\chi_{18}^{(139)}$	1	A	/A	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1
$\chi_{18}^{(140)}$	1	/A	A	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1
$\chi_{18}^{(141)}$	-1	-A	-/A	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
$\chi_{18}^{(142)}$	-1	-/A	-A	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
$\chi_{18}^{(143)}$	-1	-A	-/A	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1
$\chi_{18}^{(144)}$	-1	-/A	-A	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1
$\chi_{18}^{(145)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(146)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(147)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(148)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(149)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(150)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	140										150											
$\chi_{18}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
$\chi_{18}^{(2)}$	-1	-1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
$\chi_{18}^{(3)}$	1	1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
$\chi_{18}^{(4)}$	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
$\chi_{18}^{(5)}$	-A	-/A	/A	1	A	1	A	/A	-/A	-1	-A	-A	-A	-A	-A	-A	-A	-A	-A	-A	-A	
$\chi_{18}^{(6)}$	-/A	-A	A	1	/A	1	/A	A	-A	-1	-/A	-/A	-/A	-/A	-/A	-/A	-/A	-/A	-/A	-/A	-/A	
$\chi_{18}^{(7)}$	A	/A	-/A	-1	-A	1	A	/A	-/A	-1	-A	-A	-A	-A	-A	-A	-A	-A	-A	-A	-A	
$\chi_{18}^{(8)}$	/A	A	-A	-1	-/A	1	/A	A	-A	-1	-/A	-/A	-/A	-/A	-/A	-/A	-/A	-/A	-/A	-/A	-/A	
$\chi_{18}^{(9)}$	-A	-/A	-/A	-1	-A	1	A	/A	/A	1	A	-A	-A	-A	-A	-A	-A	-A	-A	-A	-A	
$\chi_{18}^{(10)}$	-/A	-A	-A	-1	-/A	1	/A	A	A	1	/A	-/A	-/A	-/A	-/A	-/A	-/A	-/A	-/A	-/A	-/A	
$\chi_{18}^{(11)}$	A	/A	/A	1	A	1	A	/A	/A	1	A	-A	-A	-A	-A	-A	-A	-A	-A	-A	-A	
$\chi_{18}^{(12)}$	/A	A	A	1	/A	1	/A	A	A	1	/A	-/A	-/A	-/A	-/A	-/A	-/A	-/A	-/A	-/A	-/A	
$\chi_{18}^{(13)}$	.	.	.	.	.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
$\chi_{18}^{(14)}$	.	.	.	.	.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
$\chi_{18}^{(15)}$	.	.	.	.	.	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	

	140										150
$\chi_{18}^{(16)}$	.	.	.	.	.	1	1	1	-1	-1	-1
$\chi_{18}^{(17)}$	.	.	.	.	.	1	A	/A	/A	1	A
$\chi_{18}^{(18)}$	.	.	.	.	.	1	/A	A	A	1	/A
$\chi_{18}^{(19)}$	.	.	.	.	.	1	A	/A	/A	1	A
$\chi_{18}^{(20)}$	.	.	.	.	.	1	/A	A	A	1	/A
$\chi_{18}^{(21)}$	.	.	.	.	.	1	A	/A	-/A	-1	-A
$\chi_{18}^{(22)}$	.	.	.	.	.	1	/A	A	-A	-1	-/A
$\chi_{18}^{(23)}$	.	.	.	.	.	1	A	/A	-/A	-1	-A
$\chi_{18}^{(24)}$	.	.	.	.	.	1	/A	A	-A	-1	-/A
$\chi_{18}^{(25)}$	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(26)}$	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(27)}$	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(28)}$	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(29)}$	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(30)}$	.	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(31)}$	1	1	1	1	1	-1	-1	-1	-1	-1	-1
$\chi_{18}^{(32)}$	1	1	1	1	1	-2	-2	-2	-2	-2	-2
$\chi_{18}^{(33)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_{18}^{(34)}$	-1	-1	-1	-1	-1	-2	-2	-2	-2	-2	-2
$\chi_{18}^{(35)}$	1	1	-1	-1	-1	-1	-1	-1	1	1	1
$\chi_{18}^{(36)}$	1	1	-1	-1	-1	-2	-2	-2	2	2	2
$\chi_{18}^{(37)}$	-1	-1	1	1	1	-1	-1	-1	1	1	1
$\chi_{18}^{(38)}$	-1	-1	1	1	1	-2	-2	-2	2	2	2
$\chi_{18}^{(39)}$	A	/A	/A	1	A	-1	-A	-/A	-/A	-1	-A
$\chi_{18}^{(40)}$	/A	A	A	1	/A	-1	-/A	-A	-A	-1	-/A
$\chi_{18}^{(41)}$	A	/A	/A	1	A	-2	-/O	-O	-O	-2	-/O
$\chi_{18}^{(42)}$	/A	A	A	1	/A	-2	-O	-/O	-/O	-2	-O
$\chi_{18}^{(43)}$	-A	-/A	-/A	-1	-A	-1	-A	-/A	-/A	-1	-A
$\chi_{18}^{(44)}$	-/A	-A	-A	-1	-/A	-1	-/A	-A	-A	-1	-/A
$\chi_{18}^{(45)}$	-A	-/A	-/A	-1	-A	-2	-/O	-O	-O	-2	-/O
$\chi_{18}^{(46)}$	-/A	-A	-A	-1	-/A	-2	-O	-/O	-/O	-2	-O
$\chi_{18}^{(47)}$	A	/A	-/A	-1	-A	-1	-A	-/A	/A	1	A
$\chi_{18}^{(48)}$	/A	A	-A	-1	-/A	-1	-/A	-A	A	1	/A
$\chi_{18}^{(49)}$	A	/A	-/A	-1	-A	-2	-/O	-O	O	2	/O
$\chi_{18}^{(50)}$	/A	A	-A	-1	-/A	-2	-O	-/O	/O	2	O
$\chi_{18}^{(51)}$	-A	-/A	/A	1	A	-1	-A	-/A	/A	1	A
$\chi_{18}^{(52)}$	-/A	-A	A	1	/A	-1	-/A	-A	A	1	/A
$\chi_{18}^{(53)}$	-A	-/A	/A	1	A	-2	-/O	-O	O	2	/O
$\chi_{18}^{(54)}$	-/A	-A	A	1	/A	-2	-O	-/O	/O	2	O
$\chi_{18}^{(55)}$	.	.	.	.	.	1	1	1	1	1	1
$\chi_{18}^{(56)}$	.	.	.	.	.	1	1	1	1	1	1
$\chi_{18}^{(57)}$	.	.	.	.	.	1	1	1	-1	-1	-1
$\chi_{18}^{(58)}$	.	.	.	.	.	1	1	1	-1	-1	-1
$\chi_{18}^{(59)}$	.	.	.	.	.	-2	-2	-2	-2	-2	-2
$\chi_{18}^{(60)}$	.	.	.	.	.	-2	-2	-2	2	2	2

	140	150					
$\chi_{18}^{(61)}$	. . . . . 1	A	/A	/A	1	A	
$\chi_{18}^{(62)}$	. . . . . 1	/A	A	A	1	/A	
$\chi_{18}^{(63)}$	. . . . . 1	A	/A	/A	1	A	
$\chi_{18}^{(64)}$	. . . . . 1	/A	A	A	1	/A	
$\chi_{18}^{(65)}$	. . . . . 1	A	/A	-/A	-1	-A	
$\chi_{18}^{(66)}$	. . . . . 1	/A	A	-A	-1	-/A	
$\chi_{18}^{(67)}$	. . . . . 1	A	/A	-/A	-1	-A	
$\chi_{18}^{(68)}$	. . . . . 1	/A	A	-A	-1	-/A	
$\chi_{18}^{(69)}$	. . . . . -2	-/O	-O	-O	-2	-/O	
$\chi_{18}^{(70)}$	. . . . . -2	-O	-/O	-/O	-2	-O	
$\chi_{18}^{(71)}$	. . . . . -2	-/O	-O	O	2	/O	
$\chi_{18}^{(72)}$	. . . . . -2	-O	-/O	/O	2	O	
$\chi_{18}^{(73)}$	. . . . . 2	2	2	2	2	2	
$\chi_{18}^{(74)}$	. . . . . 2	2	2	2	2	2	
$\chi_{18}^{(75)}$	. . . . . 2	2	2	-2	-2	-2	
$\chi_{18}^{(76)}$	. . . . . 2	2	2	-2	-2	-2	
$\chi_{18}^{(77)}$	. . . . . 2	/O	O	O	2	/O	
$\chi_{18}^{(78)}$	. . . . . 2	O	/O	/O	2	O	
$\chi_{18}^{(79)}$	. . . . . 2	/O	O	O	2	/O	
$\chi_{18}^{(80)}$	. . . . . 2	O	/O	/O	2	O	
$\chi_{18}^{(81)}$	. . . . . 2	/O	O	-O	-2	-/O	
$\chi_{18}^{(82)}$	. . . . . 2	O	/O	-/O	-2	-O	
$\chi_{18}^{(83)}$	. . . . . 2	/O	O	-O	-2	-/O	
$\chi_{18}^{(84)}$	. . . . . 2	O	/O	-/O	-2	-O	
$\chi_{18}^{(85)}$	. . . . . -1	-1	-1	-1	-1	-1	
$\chi_{18}^{(86)}$	. . . . . -1	-1	-1	-1	-1	-1	
$\chi_{18}^{(87)}$	. . . . . -1	-1	-1	1	1	1	
$\chi_{18}^{(88)}$	. . . . . -1	-1	-1	1	1	1	
$\chi_{18}^{(89)}$	. . . . . -1	-A	-/A	-/A	-1	-A	
$\chi_{18}^{(90)}$	. . . . . -1	-/A	-A	-A	-1	-/A	
$\chi_{18}^{(91)}$	. . . . . -1	-A	-/A	-/A	-1	-A	
$\chi_{18}^{(92)}$	. . . . . -1	-/A	-A	-A	-1	-/A	
$\chi_{18}^{(93)}$	. . . . . -1	-A	-/A	/A	1	A	
$\chi_{18}^{(94)}$	. . . . . -1	-/A	-A	A	1	/A	
$\chi_{18}^{(95)}$	. . . . . -1	-A	-/A	/A	1	A	
$\chi_{18}^{(96)}$	. . . . . -1	-/A	-A	A	1	/A	
$\chi_{18}^{(97)}$	. . . . . -1	-1	-1	-1	-1	-1	
$\chi_{18}^{(98)}$	. . . . . -1	-1	-1	-1	-1	-1	
$\chi_{18}^{(99)}$	. . . . . -1	-1	-1	1	1	1	
$\chi_{18}^{(100)}$	. . . . . -1	-1	-1	1	1	1	
$\chi_{18}^{(101)}$	. . . . . .	.	.	.	.	.
$\chi_{18}^{(102)}$	. . . . . .	.	.	.	.	.
$\chi_{18}^{(103)}$	. . . . . -1	-A	-/A	-/A	-1	-A	
$\chi_{18}^{(104)}$	. . . . . -1	-/A	-A	-A	-1	-/A	
$\chi_{18}^{(105)}$	. . . . . -1	-A	-/A	-/A	-1	-A	
$\chi_{18}^{(106)}$	. . . . . -1	-/A	-A	-A	-1	-/A	
$\chi_{18}^{(107)}$	. . . . . -1	-A	-/A	/A	1	A	
$\chi_{18}^{(108)}$	. . . . . -1	-/A	-A	A	1	/A	
$\chi_{18}^{(109)}$	. . . . . 1	A	/A	/A	1	A	

	140					150				
$\chi_{18}^{(111)}$	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(112)}$	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(113)}$	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(114)}$	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(115)}$	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(116)}$	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(117)}$	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(118)}$	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(119)}$	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(120)}$	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(121)}$	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(122)}$	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(123)}$	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(124)}$	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(125)}$	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(126)}$	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(127)}$	.	.	.	.	.	2	2	2	2	2
$\chi_{18}^{(128)}$	.	.	.	.	.	2	2	2	-2	-2
$\chi_{18}^{(129)}$	.	.	.	.	.	2	/O	O	O	2
$\chi_{18}^{(130)}$	.	.	.	.	.	2	O	/O	/O	2
$\chi_{18}^{(131)}$	.	.	.	.	.	2	/O	O	-O	-2
$\chi_{18}^{(132)}$	.	.	.	.	.	2	O	/O	-/O	-2
$\chi_{18}^{(133)}$	1	1	1	1	1	.	.	.	.	.
$\chi_{18}^{(134)}$	-1	-1	-1	-1	-1	.	.	.	.	.
$\chi_{18}^{(135)}$	1	1	-1	-1	-1	.	.	.	.	.
$\chi_{18}^{(136)}$	-1	-1	1	1	1	.	.	.	.	.
$\chi_{18}^{(137)}$	A	/A	/A	1	A	.	.	.	.	.
$\chi_{18}^{(138)}$	/A	A	A	1	/A	.	.	.	.	.
$\chi_{18}^{(139)}$	-A	-/A	-/A	-1	-A	.	.	.	.	.
$\chi_{18}^{(140)}$	-/A	-A	-A	-1	-/A	.	.	.	.	.
$\chi_{18}^{(141)}$	A	/A	-/A	-1	-A	.	.	.	.	.
$\chi_{18}^{(142)}$	/A	A	-A	-1	-/A	.	.	.	.	.
$\chi_{18}^{(143)}$	-A	-/A	/A	1	A	.	.	.	.	.
$\chi_{18}^{(144)}$	-/A	-A	A	1	/A	.	.	.	.	.
$\chi_{18}^{(145)}$	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(146)}$	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(147)}$	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(148)}$	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(149)}$	.	.	.	.	.	.	.	.	.	.
$\chi_{18}^{(150)}$	.	.	.	.	.	.	.	.	.	.

where $A = E(3)^2 = (-1-ER(-3))/2 = -1-b3$, $B = 6^*E(3)^2 = -3-3^*ER(-3) = -3-3i3$, $C = 10^*E(3)^2 = -5-5^*ER(-3) = -5-5i3$, $D = 15^*E(3)^2 = (-15-15^*ER(-3))/2 = -15-15b3$, $E = 20^*E(3)^2 = -10-10^*ER(-3) = -10-10i3$, $F = 24^*E(3)^2 = -12-12^*ER(-3) = -12-12i3$, $G = 30^*E(3)^2 = -15-15^*ER(-3) = -15-15i3$, $H = 60^*E(3)^2 = -30-30^*ER(-3) = -30-30i3$, $I = 64^*E(3)^2 = -32-32^*ER(-3) = -32-32i3$, $J = 80^*E(3)^2 = -40-40^*ER(-3) = -40-40i3$, $K = 81^*E(3)^2 = (-81-81^*ER(-3))/2 = -81-81b3$, $L = 90^*E(3)^2 = -45-45^*ER(-3) = -45-45i3$, $M = 4^*E(3) =$

$$\begin{aligned}
-2+2^*\text{ER}(-3) &= 4b3, N = 3^*\text{E}(3) = (-3+3^*\text{ER}(-3))/2 = 3b3, O = 2^*\text{E}(3) = -1+\text{ER}(-3) = 2b3, P = -5^*\text{E}(3)^2 \\
&= (5+5^*\text{ER}(-3))/2 = 5+5b3, Q = -16^*\text{E}(3)^2 = 8+8^*\text{ER}(-3) = 8+8i3, R = 9^*\text{E}(3)^2 = (-9-9^*\text{ER}(-3))/2 = \\
-9-9b3, S &= -7^*\text{E}(3)^2 = (7+7^*\text{ER}(-3))/2 = 7+7b3, T = -8^*\text{E}(3)^2 = 4+4^*\text{ER}(-3) = 4+4i3, U = 12^*\text{E}(3)^2 = \\
-6-6^*\text{ER}(-3) &= -6-6i3.
\end{aligned}$$

The generators of $G^{s_{19}}$ are:

$$\begin{pmatrix} 0 & 0 & 1 & -1 & 1 & 0 & 0 & -2 \\ -1 & 0 & 2 & -2 & 2 & 0 & 0 & -2 \\ -1 & 0 & 2 & -2 & 2 & 1 & -1 & -3 \\ -1 & 0 & 3 & -3 & 3 & 1 & -1 & -4 \\ -1 & 0 & 2 & -2 & 3 & 0 & -1 & -3 \\ -1 & 0 & 1 & -1 & 2 & 0 & 0 & -3 \\ -1 & -1 & 1 & 0 & 1 & 0 & 0 & -2 \\ -1 & 0 & 1 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 0 & 0 & -2 & 2 & -1 & 1 \\ 1 & 1, -1 & 1 & -3 & 2 & -1 & 1 & \\ 1 & 2 & 0 & 0 & -4 & 3 & -1 & 1 \\ 1 & 2 & 0 & 1 & -6 & 4 & -2 & 2 \\ 1 & 1 & 0 & 1 & -5 & 3 & -1 & 2 \\ 1 & 1 & 0 & 0 & -3 & 2 & -1 & 2 \\ 1 & 1 & 0 & 0 & -2 & 1 & -1 & 2 \\ 1 & 0 & 0 & 0 & -1 & 1 & -1 & 1 \end{pmatrix}.$$

The representatives of conjugacy classes of $G^{s_{19}}$ are:

$$\begin{pmatrix} 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} -1 & -2 & 1 & 1 & -1 & 1 & 0 & 0 \\ -3 & -2 & 2 & 1 & -1 & 1 & 0 & 0 \\ -3 & -3 & 2 & 2 & -2 & 2 & -1 & 1 \\ -5 & -4 & 3 & 3 & -3 & 2 & 0 & 1 \\ -4 & -3 & 2 & 2 & -2 & 2 & 0 & 1 \\ -3 & -2 & 2 & 1 & -2 & 2 & 0 & 1 \\ -2 & -2 & 1 & 1 & -1 & 1 & 0 & 1 \\ -1 & -1 & 1 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 0 & 0 & 0 & 1 & 1 & -1 \\ -3 & -1 & 1 & 0 & 0 & 1 & 1 & -1 \\ -3 & -1 & 0 & 0 & 0 & 2 & 1 & -1 \\ -5 & -1 & 1 & 0 & -1 & 3 & 2 & -2 \\ -4 & -1 & 1 & 0 & -1 & 3 & 1 & -1 \\ -3 & -1 & 1 & 0 & -1 & 2 & 1 & 0 \\ -2 & -1 & 1 & 0 & -1 & 2 & 0 & 0 \\ -1 & 0 & 1 & -1 & 0 & 1 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} -1 & -1 & 0 & 1 & 0 & -1 & 0 & 1 \\ -2 & -1 & 1 & 0 & 1 & -1 & -1 & 2 \\ -2 & -1 & 0 & 1 & 1 & -2 & -1 & 3 \\ -3 & -1 & 1 & 0 & 2 & -3 & -1 & 4 \\ -3 & 0 & 1 & 0 & 1 & -2 & -1 & 3 \\ -2 & 0 & 1 & 0 & 1 & -2 & -1 & 2 \\ -1 & 0 & 0 & 0 & 1 & -1 & -1 & 1 \\ -1 & 0 & 0 & 0 & 1 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 1 & 0 & -1 & 2 & 0 & -1 \\ -1 & -2 & 1 & 1 & -2 & 2 & 1 & -2 \\ -1 & -2 & 1 & 1 & -3 & 4 & 0 & -2 \\ -2 & -3 & 2 & 2 & -5 & 5 & 1 & -3 \\ -1 & -3 & 1 & 2 & -4 & 4 & 1 & -2 \\ -1 & -2 & 1 & 1 & -3 & 3 & 1 & -1 \\ -1 & -2 & 1 & 1 & -2 & 2 & 0 & 0 \\ 0 & -1 & 1 & 0 & -1 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 1 & 1 & -1 & 0 & -1 & 1 \\ 0 & -2 & 1 & 1 & -1 & 0 & -1 & 1 \\ 0 & -2 & 1 & 2 & -2 & 0 & -2 & 2 \\ 0 & -3 & 2 & 2 & -2 & -1 & -2 & 3 \\ 0 & -2 & 1 & 2 & -2 & -1 & -1 & 2 \\ 0 & -1 & 1 & 1 & -1 & -1 & -1 & 1 \\ 0 & -1 & 0 & 1 & 0 & -1 & -1 & 1 \\ 0 & -1 & 0 & 1 & 0 & -1 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} -1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & -1 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & -1 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & -1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & -1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & -1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & -1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 0 & 1 & -1 & -1 & 2 & 0 \\ -2 & 1 & 1 & 0 & -1 & -1 & 2 & 1 \\ -3 & 0 & 1 & 1 & -1 & -2 & 3 & 1 \\ -4 & 1 & 1 & 1 & -2 & -2 & 4 & 2 \\ -4 & 1 & 1 & 1 & -2 & -1 & 3 & 1 \\ -3 & 1 & 1 & 1 & -2 & -1 & 2 & 1 \\ -2 & 1 & 1 & 0 & -1 & -1 & 2 & 0 \\ -1 & 1 & 0 & 0 & 0 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 1 & 0 & -1 & 1 & -1 & 0 \\ -2 & 0 & 2 & -1 & 0 & 1 & -2 & 1 \\ -2 & 1 & 2 & -1 & -1 & 2 & -3 & 1 \\ -3 & 1 & 4 & -2 & -1 & 2 & -4 & 2 \\ -3 & 1 & 3 & -1 & -1 & 1 & -3 & 2 \\ -2 & 1 & 2 & -1 & 0 & 0 & -2 & 1 \\ -1 & 0 & 1 & 0 & 0 & 0 & -2 & 1 \\ -1 & 0 & 1 & 0 & 0 & 0 & -1 & 0 \end{pmatrix}, \\
\begin{pmatrix} -1 & 0 & 1 & 1 & -2 & 0 & 1 & 0 \\ 0 & 0 & 1 & 1 & -3 & 0 & 2 & 0 \\ -1 & -1 & 2 & 2 & -4 & 0 & 2 & 0 \\ -1 & -1 & 2 & 3 & -6 & 0 & 3 & 1 \\ -1 & -1 & 1 & 3 & -5 & 0 & 3 & 0 \\ -1 & 0 & 1 & 2 & -4 & 0 & 2 & 0 \\ -1 & 0 & 1 & 1 & -2 & -1 & 2 & 0 \\ 0 & 0 & 0 & 1 & -1 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 1 & 0 & 0 & -1 & 0 & 2 & -1 \\ 0 & 1 & 0 & 0 & -2 & 0 & 3 & -1 \\ -1 & 1 & 0 & 0 & -2 & 0 & 4 & -2 \\ -1 & 2 & 0 & 0 & -4 & 1 & 5 & -2 \\ -1 & 1 & 0 & 1 & -4 & 1 & 4 & -2 \\ -1 & 1 & 0 & 1 & -3 & 0 & 3 & -1 \\ -1 & 1 & 1 & 0 & -2 & 0 & 2 & -1 \\ 0 & 1 & 0 & 0 & -1 & 0 & 1 & -1 \end{pmatrix}, \begin{pmatrix} -1 & 1 & 1 & 0 & -2 & 1 & 1 & -1 \\ -2 & 2 & 2 & -1 & -2 & 1 & 1 & 0 \\ -3 & 2 & 3 & -1 & -3 & 2 & 1 & -1 \\ -4 & 3 & 4 & -1 & -5 & 3 & 1 & 0 \\ -4 & 2 & 3 & 0 & -4 & 2 & 1 & 0 \\ -3 & 2 & 2 & 0 & -3 & 1 & 1 & 0 \\ -2 & 1 & 2 & 0 & -2 & 0 & 1 & 0 \\ -1 & 1 & 1 & 0 & -1 & 0 & 0 & 0 \end{pmatrix},
\end{aligned}$$

$$\begin{pmatrix} 0 & -1 & -2 & 2 & 0 & 0 & 0 & 0 \\ -1 & -1 & -2 & 2 & 0 & 1 & -1 & 1 \\ -1 & -1 & -3 & 3 & 0 & 0 & 0 & 1 \\ -2 & -2 & -4 & 4 & 0 & 1 & 0 & 1 \\ -2 & -1 & -3 & 3 & 0 & 1 & 0 & 0 \\ -2 & -1 & -2 & 3 & -1 & 1 & 0 & 0 \\ -1 & 0 & -2 & 2 & -1 & 1 & 0 & 0 \\ -1 & 0 & -1 & 1 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -1 & -1 & 2 & -1 & 1 & -1 & 0 \\ 1 & -2 & -2 & 3 & -2 & 2 & -1 & 0 \\ 1 & -2 & -2 & 4 & -3 & 2 & -1 & 0 \\ 1 & -4 & -3 & 6 & -4 & 3 & -1 & 0 \\ 1 & -3 & -3 & 5 & -3 & 2 & 0 & -1 \\ 0 & -2 & -2 & 4 & -3 & 2 & 0 & -1 \\ 0 & -1 & -2 & 3 & -2 & 1 & 0 & 0 \\ 0 & -1 & -1 & 2 & -1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 0 & 0 & 2 & -2 & 1 & -1 \\ -1 & -1 & 1 & -1 & 3 & -2 & 1 & -1 \\ -1 & -2 & 0 & 0 & 4 & -3 & 1 & -1 \\ -1 & -2 & 0 & -1 & 6 & -4 & 2 & -2 \\ -1 & -1 & 0 & -1 & 5 & -3 & 1 & -2 \\ -1 & -1 & 0 & 0 & 3 & -2 & 1 & -2 \\ -1 & -1 & 0 & 0 & 2 & -1 & 1 & -2 \\ -1 & 0 & 0 & 0 & 1 & -1 & 1 & -1 \end{pmatrix}, \\
\begin{pmatrix} 0 & -1 & 1 & 0 & 1 & -1 & 0 & -1 \\ 1 & -2 & 1 & 0 & 1 & -1 & 1 & -2 \\ 1 & -3 & 1 & 1 & 1 & -1 & 0 & -2 \\ 2 & -4 & 1 & 1 & 2 & -2 & 1 & -3 \\ 2 & -3 & 0 & 1 & 2 & -2 & 1 & -3 \\ 1 & -2 & 0 & 1 & 1 & -1 & 1 & -3 \\ 0 & -2 & 0 & 1 & 1 & -1 & 1 & -2 \\ 0 & -1 & 0 & 1 & 0 & -1 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & -2 & 1 & 0 & 1 & 0 & -1 \\ 1 & -1 & -3 & 2 & -1 & 2 & 0 & -1 \\ 1 & 0 & -4 & 2 & -1 & 2 & 1 & -2 \\ 1 & -1 & -5 & 3 & -2 & 4 & 1 & -3 \\ 1 & -1 & -4 & 3 & -2 & 3 & 1 & -3 \\ 0 & -1 & -3 & 3 & -2 & 2 & 1 & -2 \\ 0 & 0 & -2 & 2 & -2 & 2 & 0 & -1 \\ 0 & 0 & -1 & 1 & -1 & 1 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & -1 & 1 & -1 & 0 & 0 & 2 \\ 1 & 0 & -2 & 2 & -2 & 0 & 0 & 2 \\ 1 & 0 & -2 & 2 & -2 & -1 & 1 & 3 \\ 1 & 0 & -3 & 3 & -3 & -1 & 1 & 4 \\ 1 & 0 & -2 & 2 & -3 & 0 & 1 & 3 \\ 1 & 0 & -1 & 1 & -2 & 0 & 0 & 3 \\ 1 & 1 & -1 & 0 & -1 & 0 & 0 & 2 \\ 1 & 0 & -1 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \\
\begin{pmatrix} 0 & 0 & -1 & 1 & -1 & 2 & -1 & -1 \\ -1 & 0 & -1 & 1 & -1 & 3 & -2 & 0 \\ -1 & 1 & -1 & 1 & -2 & 4 & -2 & -1 \\ -2 & 0 & -1 & 2 & -3 & 6 & -3 & -1 \\ -2 & 0 & -1 & 2 & -2 & 4 & -2 & -1 \\ -2 & 0 & -1 & 2 & -2 & 3 & -1 & -1 \\ -1 & 0 & -1 & 2 & -2 & 2 & -1 & 0 \\ -1 & 0 & 0 & 1 & -1 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 0 & -1 & 2 & -1 & 1 & -2 \\ 1 & -1 & 0 & -1 & 2 & -1 & 2 & -3 \\ 1 & -1 & -1 & -1 & 3 & -1 & 2 & -4 \\ 2 & -1 & -1 & -2 & 4 & -1 & 3 & -6 \\ 2 & -1 & -1 & -1 & 3 & -1 & 2 & -5 \\ 1 & -1 & -1 & 0 & 2 & -1 & 2 & -4 \\ 0 & -1 & 0 & 0 & 1 & 0 & 1 & -3 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & -2 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 0 & 1 & -2 & 1 & -1 & 2 \\ -1 & 1 & 0 & 1 & -2 & 1 & -2 & 3 \\ -1 & 1 & 1 & 1 & -3 & 1 & -2 & 4 \\ -2 & 1 & 1 & 2 & -4 & 1 & -3 & 6 \\ -2 & 1 & 1 & 1 & -3 & 1 & -2 & 5 \\ -1 & 1 & 1 & 0 & -2 & 1 & -2 & 4 \\ 0 & 1 & 0 & 0 & -1 & 0 & -1 & 3 \\ 0 & 0 & 0 & 0 & 0 & 0 & -1 & 2 \end{pmatrix}, \\
\begin{pmatrix} 0 & 0 & 1 & -1 & 1 & -2 & 1 & 1 \\ 1 & 0 & 1 & -1 & 1 & -3 & 2 & 0 \\ 1 & -1 & 1 & -1 & 2 & -4 & 2 & 1 \\ 2 & 0 & 1 & -2 & 3 & -6 & 3 & 1 \\ 2 & 0 & 1 & -2 & 2 & -4 & 2 & 1 \\ 2 & 0 & 1 & -2 & 2 & -3 & 1 & 1 \\ 1 & 0 & 1 & -2 & 2 & -2 & 1 & 0 \\ 1 & 0 & 0 & -1 & 1 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 1 & -1 & 1 & 0 & 0 & -2 \\ -1 & 0 & 2 & -2 & 2 & 0 & 0 & -2 \\ -1 & 0 & 2 & -2 & 2 & 1 & -1 & -3 \\ -1 & 0 & 3 & -3 & 3 & 1 & -1 & -4 \\ -1 & 0 & 2 & -2 & 3 & 0 & -1 & -3 \\ -1 & 0 & 1 & -1 & 2 & 0 & 0 & -3 \\ -1 & -1 & 1 & 0 & 1 & 0 & 0 & -2 \\ -1 & 0 & 1 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 2 & -1 & 0 & -1 & 0 & 1 \\ -1 & 1 & 3 & -2 & 1 & -2 & 0 & 1 \\ -1 & 0 & 4 & -2 & 1 & -2 & -1 & 2 \\ -1 & 1 & 5 & -3 & 2 & -4 & -1 & 3 \\ -1 & 1 & 4 & -3 & 2 & -3 & -1 & 3 \\ 0 & 1 & 3 & -3 & 2 & -2 & -1 & 2 \\ 0 & 0 & 2 & -2 & 2 & -2 & 0 & 1 \\ 0 & 0 & 1 & -1 & 1 & -1 & 0 & 1 \end{pmatrix}, \\
\begin{pmatrix} 0 & 1 & -1 & 0 & -1 & 1 & 0 & 1 \\ -1 & 2 & -1 & 0 & -1 & 1 & -1 & 2 \\ -1 & 3 & -1 & -1 & -1 & 1 & 0 & 2 \\ -2 & 4 & -1 & -1 & -2 & 2 & -1 & 3 \\ -2 & 3 & 0 & -1 & -2 & 2 & -1 & 3 \\ -1 & 2 & 0 & -1 & -1 & 1 & -1 & 3 \\ 0 & 2 & 0 & -1 & -1 & 1 & -1 & 2 \\ 0 & 1 & 0 & -1 & 0 & 1 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 0 & 0 & -2 & 2 & -1 & 1 \\ 1 & 1 & -1 & 1 & -3 & 2 & -1 & 1 \\ 1 & 2 & 0 & 0 & -4 & 3 & -1 & 1 \\ 1 & 2 & 0 & 1 & -6 & 4 & -2 & 2 \\ 1 & 1 & 0 & 1 & -5 & 3 & -1 & 2 \\ 1 & 1 & 0 & 0 & -3 & 2 & -1 & 2 \\ 1 & 1 & 0 & 0 & -2 & 1 & -1 & 2 \\ 1 & 0 & 0 & 0 & -1 & 1 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 1 & -2 & 1 & -1 & 1 & 0 \\ -1 & 2 & 2 & -3 & 2 & -2 & 1 & 0 \\ -1 & 2 & 2 & -4 & 3 & -2 & 1 & 0 \\ -1 & 4 & 3 & -6 & 4 & -3 & 1 & 0 \\ -1 & 3 & 3 & -5 & 3 & -2 & 0 & 1 \\ 0 & 2 & 2 & -4 & 3 & -2 & 0 & 1 \\ 0 & 1 & 2 & -3 & 2 & -1 & 0 & 0 \\ 0 & 1 & 1 & -2 & 1 & 0 & 0 & 0 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} 0 & 1 & 2 & -2 & 0 & 0 & 0 & 0 \\ 1 & 1 & 2 & -2 & 0 & -1 & 1 & -1 \\ 1 & 1 & 3 & -3 & 0 & 0 & 0 & -1 \\ 2 & 2 & 4 & -4 & 0 & -1 & 0 & -1 \\ 2 & 1 & 3 & -3 & 0 & -1 & 0 & 0 \\ 2 & 1 & 2 & -3 & 1 & -1 & 0 & 0 \\ 1 & 0 & 2 & -2 & 1 & -1 & 0 & 0 \\ 1 & 0 & 1 & -1 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & -1 & -1 & 0 & 2 & -1 & -1 & 1 \\ 2 & -2 & -2 & 1 & 2 & -1 & -1 & 0 \\ 3 & -2 & -3 & 1 & 3 & -2 & -1 & 1 \\ 4 & -3 & -4 & 1 & 5 & -3 & -1 & 0 \\ 4 & -2 & -3 & 0 & 4 & -2 & -1 & 0 \\ 3 & -2 & -2 & 0 & 3 & -1 & -1 & 0 \\ 2 & -1 & -2 & 0 & 2 & 0 & -1 & 0 \\ 1 & -1 & -1 & 0 & 1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & -1 & 0 & 0 & 1 & 0 & -2 & 1 \\ 0 & -1 & 0 & 0 & 2 & 0 & -3 & 1 \\ 1 & -1 & 0 & 0 & 2 & 0 & -4 & 2 \\ 1 & -2 & 0 & 0 & 4 & -1 & -5 & 2 \\ 1 & -1 & 0 & -1 & 4 & -1 & -4 & 2 \\ 1 & -1 & 0 & -1 & 3 & 0 & -3 & 1 \\ 1 & -1 & -1 & 0 & 2 & 0 & -2 & 1 \\ 0 & -1 & 0 & 0 & 1 & 0 & -1 & 1 \end{pmatrix}, \\
\begin{pmatrix} 1 & 0 & -1 & -1 & 2 & 0 & -1 & 0 \\ 0 & 0 & -1 & -1 & 3 & 0 & -2 & 0 \\ 1 & 1 & -2 & -2 & 4 & 0 & -2 & 0 \\ 1 & 1 & -2 & -3 & 6 & 0 & -3 & -1 \\ 1 & 1 & -1 & -3 & 5 & 0 & -3 & 0 \\ 1 & 0 & -1 & -2 & 4 & 0 & -2 & 0 \\ 1 & 0 & -1 & -1 & 2 & 1 & -2 & 0 \\ 0 & 0 & 0 & -1 & 1 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & -1 & 0 & 1 & -1 & 1 & 0 \\ 2 & 0 & -2 & 1 & 0 & -1 & 2 & -1 \\ 2 & -1 & -2 & 1 & 1 & -2 & 3 & -1 \\ 3 & -1 & -4 & 2 & 1 & -2 & 4 & -2 \\ 3 & -1 & -3 & 1 & 1 & -1 & 3 & -2 \\ 2 & -1 & -2 & 1 & 0 & 0 & 2 & -1 \\ 1 & 0 & -1 & 0 & 0 & 0 & 2 & -1 \\ 1 & 0 & -1 & 0 & 0 & 0 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 0 & -1 & 1 & 1 & -2 & 0 \\ 2 & -1 & -1 & 0 & 1 & 1 & -2 & -1 \\ 3 & 0 & -1 & -1 & 1 & 2 & -3 & -1 \\ 4 & -1 & -1 & -1 & 2 & 2 & -4 & -2 \\ 4 & -1 & -1 & -1 & 2 & 1 & -3 & -1 \\ 3 & -1 & -1 & -1 & 2 & 1 & -2 & -1 \\ 2 & -1 & -1 & 0 & 1 & 1 & -2 & 0 \\ 1 & -1 & 0 & 0 & 0 & 1 & -1 & 0 \end{pmatrix}, \\
\begin{pmatrix} -1 & -2 & 0 & 1 & 0 & 0 & 1 & 0 \\ -1 & -3 & 0 & 2 & -1 & 0 & 2 & -1 \\ -1 & -4 & -1 & 3 & -1 & 0 & 2 & 0 \\ -2 & -5 & -1 & 4 & -2 & 0 & 4 & -1 \\ -1 & -4 & -1 & 3 & -2 & 1 & 3 & -1 \\ -1 & -3 & 0 & 2 & -2 & 1 & 2 & 0 \\ -1 & -2 & 0 & 1 & -1 & 1 & 1 & 0 \\ 0 & -1 & 0 & 0 & 0 & 0 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 1 & -1 & -1 & 1 & 0 & 1 & -1 \\ 0 & 2 & -1 & -1 & 1 & 0 & 1 & -1 \\ 0 & 2 & -1 & -2 & 2 & 0 & 2 & -2 \\ 0 & 3 & -2 & -2 & 2 & 1 & 2 & -3 \\ 0 & 2 & -1 & -2 & 2 & 1 & 1 & -2 \\ 0 & 1 & -1 & -1 & 1 & 1 & 1 & -1 \\ 0 & 1 & 0 & -1 & 0 & 1 & 1 & -1 \\ 0 & 1 & 0 & -1 & 0 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 1 & -1 & 0 & 1 & -2 & 0 & 1 \\ 1 & 2 & -1 & -1 & 2 & -2 & -1 & 2 \\ 1 & 2 & -1 & -1 & 3 & -4 & 0 & 2 \\ 2 & 3 & -2 & -2 & 5 & -5 & -1 & 3 \\ 1 & 3 & -1 & -2 & 4 & -4 & -1 & 2 \\ 1 & 2 & -1 & -1 & 3 & -3 & -1 & 1 \\ 1 & 2 & -1 & -1 & 2 & -2 & 0 & 0 \\ 0 & 1 & -1 & 0 & 1 & -1 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 1 & 1 & 0 & -1 & 0 & 1 & 0 & -1 \\ 2 & 1 & -1 & 0 & -1 & 1 & 1 & -2 \\ 2 & 1 & 0 & -1 & -1 & 2 & 1 & -3 \\ 3 & 1 & -1 & 0 & -2 & 3 & 1 & -4 \\ 3 & 0 & -1 & 0 & -1 & 2 & 1 & -3 \\ 2 & 0 & -1 & 0 & -1 & 2 & 1 & -2 \\ 1 & 0 & 0 & 0 & -1 & 1 & 1 & -1 \\ 1 & 0 & 0 & 0 & -1 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 1 & 0 & 0 & 0 & -1 & -1 & 1 \\ 3 & 1 & -1 & 0 & 0 & -1 & -1 & 1 \\ 3 & 1 & 0 & 0 & 0 & -2 & -1 & 1 \\ 5 & 1 & -1 & 0 & 1 & -3 & -2 & 2 \\ 4 & 1 & -1 & 0 & 1 & -3 & -1 & 1 \\ 3 & 1 & -1 & 0 & 1 & -2 & -1 & 0 \\ 2 & 1 & -1 & 0 & 1 & -2 & 0 & 0 \\ 1 & 0 & -1 & 1 & 0 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 2 & -1 & -1 & 1 & -1 & 0 & 0 \\ 3 & 2 & -2 & -1 & 1 & -1 & 0 & 0 \\ 3 & 3 & -2 & -2 & 2 & -2 & 1 & -1 \\ 5 & 4 & -3 & -3 & 3 & -2 & 0 & -1 \\ 4 & 3 & -2 & -2 & 2 & -2 & 0 & -1 \\ 3 & 2 & -2 & -1 & 2 & -2 & 0 & -1 \\ 2 & 2 & -1 & -1 & 1 & -1 & 0 & -1 \\ 1 & 1 & -1 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \\
\begin{pmatrix} 1 & 2 & 0 & -1 & 0 & 0 & -1 & 0 \\ 1 & 3 & 0 & -2 & 1 & 0 & -2 & 1 \\ 1 & 4 & 1 & -3 & 1 & 0 & -2 & 0 \\ 2 & 5 & 1 & -4 & 2 & 0 & -4 & 1 \\ 1 & 4 & 1 & -3 & 2 & -1 & -3 & 1 \\ 1 & 3 & 0 & -2 & 2 & -1 & -2 & 0 \\ 1 & 2 & 0 & -1 & 1 & -1 & -1 & 0 \\ 0 & 1 & 0 & 0 & 0 & 0 & -1 & 0 \end{pmatrix}.
\end{pmatrix}$$

The character table of $G^{s_{19}}$:

	10										20										
$\chi_{19}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{19}^{(2)}$	1	1	1	1	-1	-1	-1	1	1	-1	-1	1	1	-1	1	-1	-1	1	-1	1	-1
$\chi_{19}^{(3)}$	1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	-1	1	1	-1	-1	1	-1
$\chi_{19}^{(4)}$	1	1	1	-1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	-1	-1	1	1	-1
$\chi_{19}^{(5)}$	1	1	-1	C	C	-1	1	C	-C	-1	1	-C	C	-1	C	-1	1	-C	-C	1	1
$\chi_{19}^{(6)}$	1	1	-1	-C	-C	-1	1	-C	C	-1	1	C	-C	-1	-C	-1	1	C	C	1	1
$\chi_{19}^{(7)}$	1	1	-1	-C	C	1	-1	-C	C	1	-1	C	-C	1	-C	1	-1	-C	C	-1	1
$\chi_{19}^{(8)}$	1	1	-1	C	-C	1	-1	C	-C	1	-1	-C	C	1	C	1	-1	C	-C	-1	1
$\chi_{19}^{(9)}$	1	A	-A	C	D	-1	1	-/D	-C	-/A	/A	/D	-/E	-/B	E	-B	/B	-E	/E	B	B
$\chi_{19}^{(10)}$	1	A	-A	-C	-D	-1	1	/D	C	-/A	/A	-/D	/E	-/B	-E	-B	/B	E	-/E	B	B
$\chi_{19}^{(11)}$	1	B	-B	C	E	-1	1	-/E	-C	-/B	/B	/E	D	-A	-/D	-/A	A	/D	-D	/A	/A
$\chi_{19}^{(12)}$	1	B	-B	-C	-E	-1	1	/E	C	-/B	/B	-/E	-D	-A	/D	-/A	A	-/D	D	/A	/A
$\chi_{19}^{(13)}$	1	/B	-/B	C	-/E	-1	1	E	-C	-B	B	-E	-/D	-/A	D	-A	/A	-D	/D	A	A
$\chi_{19}^{(14)}$	1	/B	-/B	-C	/E	-1	1	-E	C	-B	B	E	/D	-/A	-D	-A	/A	D	-/D	A	A
$\chi_{19}^{(15)}$	1	/A	-/A	C	-/D	-1	1	D	-C	-A	A	-D	E	-B	-/E	-/B	B	/E	-E	/B	/B
$\chi_{19}^{(16)}$	1	/A	-/A	-C	/D	-1	1	-D	C	-A	A	D	-E	-B	/E	-/B	B	-/E	E	/B	/B
$\chi_{19}^{(17)}$	1	A	-A	-C	D	1	-1	/D	C	/A	-/A	-/D	/E	/B	-E	B	-/B	-E	-/E	-B	B
$\chi_{19}^{(18)}$	1	A	-A	C	-D	1	-1	-/D	-C	/A	-/A	/D	-/E	/B	E	B	-/B	E	/E	-B	B
$\chi_{19}^{(19)}$	1	B	-B	-C	E	1	-1	/E	C	/B	-/B	-/E	-D	A	/D	/A	-A	/D	D	-/A	/A
$\chi_{19}^{(20)}$	1	B	-B	C	-E	1	-1	-/E	-C	/B	-/B	/E	D	A	-/D	/A	-A	-/D	-D	-/A	/A
$\chi_{19}^{(21)}$	1	/B	-/B	-C	-/E	1	-1	-E	C	B	-B	E	/D	/A	-D	A	-/A	-D	-/D	-A	A
$\chi_{19}^{(22)}$	1	/B	-/B	C	/E	1	-1	E	-C	B	-B	-E	-/D	/A	D	A	-/A	D	/D	-A	A
$\chi_{19}^{(23)}$	1	/A	-/A	-C	-/D	1	-1	-D	C	A	-A	D	-E	B	/E	/B	-B	/E	E	-/B	/B
$\chi_{19}^{(24)}$	1	/A	-/A	C	/D	1	-1	D	-C	A	-A	-D	E	B	-/E	/B	-B	-/E	-E	-/B	/B
$\chi_{19}^{(25)}$	1	A	A	1	-A	-1	-1	/A	1	-/A	-/A	/A	/B	-/B	B	-B	-/B	-B	/B	-B	B
$\chi_{19}^{(26)}$	1	B	B	1	-B	-1	-1	/B	1	-/B	-/B	/B	A	-A	/A	-/A	-A	-/A	A	-/A	/A
$\chi_{19}^{(27)}$	1	/B	/B	1	-/B	-1	-1	B	1	-B	-B	B	/A	-/A	A	-A	-/A	-A	/A	-A	A
$\chi_{19}^{(28)}$	1	/A	/A	1	-/A	-1	-1	A	1	-A	-A	A	B	-B	/B	-/B	-B	-/B	B	-/B	/B
$\chi_{19}^{(29)}$	1	A	A	-1	-A	1	1	-/A	-1	/A	/A	-/A	-/B	/B	-B	B	/B	-B	-/B	B	B
$\chi_{19}^{(30)}$	1	B	B	-1	-B	1	1	-/B	-1	/B	/B	-/B	-A	A	-/A	/A	A	-/A	-A	/A	/A
$\chi_{19}^{(31)}$	1	/B	/B	-1	-/B	1	1	-B	-1	B	B	-B	-/A	/A	-A	A	/A	-A	-/A	A	A
$\chi_{19}^{(32)}$	1	/A	/A	-1	-/A	1	1	-A	-1	A	A	-A	-B	B	-/B	/B	B	-/B	-B	/B	/B
$\chi_{19}^{(33)}$	1	A	A	-1	A	-1	-1	-/A	-1	-/A	-/A	-/A	-/B	-/B	-B	-B	-/B	B	-/B	-B	B
$\chi_{19}^{(34)}$	1	B	B	-1	B	-1	-1	-/B	-1	-/B	-/B	-/B	-A	-A	-/A	-/A	-A	/A	-A	-/A	/A
$\chi_{19}^{(35)}$	1	/B	/B	-1	/B	-1	-1	-B	-1	-B	-B	-B	-/A	-/A	-A	-A	-/A	A	-/A	-A	/A
$\chi_{19}^{(36)}$	1	/A	/A	-1	/A	-1	-1	-A	-1	-A	-A	-A	-B	-B	-/B	-/B	-B	/B	-B	-/B	/B
$\chi_{19}^{(37)}$	1	A	A	1	A	1	1	/A	1	/A	/A	/A	/B	/B	B	B	/B	B	/B	B	/B
$\chi_{19}^{(38)}$	1	B	B	1	B	1	1	/B	1	/B	/B	/B	A	A	/A	/A	A	/A	A	/A	A
$\chi_{19}^{(39)}$	1	/B	/B	1	/B	1	1	B	1	B	B	B	/A	/A	A	A	/A	A	/A	A	/A
$\chi_{19}^{(40)}$	1	/A	/A	1	/A	1	1	A	1	A	A	A	B	B	/B	/B	B	/B	B	/B	B

	30															40
$\chi_{19}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{19}^{(2)}$	1	-1	1	-1	-1	1	1	-1	-1	-1	1	1	-1	-1	-1	1
$\chi_{19}^{(3)}$	1	-1	1	-1	-1	1	1	-1	-1	-1	1	-1	-1	1	1	-1
$\chi_{19}^{(4)}$	1	1	1	1	1	1	1	1	1	1	1	-1	1	-1	-1	-1
$\chi_{19}^{(5)}$	-1	C	-1	C	-C	1	-1	-C	C	-C	-1	C	C	-1	1	-C
$\chi_{19}^{(6)}$	-1	-C	-1	-C	C	1	-1	C	-C	C	-1	-C	-C	-1	1	C
$\chi_{19}^{(7)}$	-1	C	-1	C	-C	1	-1	-C	C	-C	-1	-C	C	1	-1	C
$\chi_{19}^{(8)}$	-1	-C	-1	-C	C	1	-1	C	-C	C	-1	C	-C	1	-1	-C
$\chi_{19}^{(9)}$	-B	E	-/B	-/E	/D	/A	-/A	-C	-/D	-D	-1	D	C	-A	A	-D
$\chi_{19}^{(10)}$	-B	-E	-/B	/E	-/D	/A	-/A	C	/D	D	-1	-D	-C	-A	A	D
$\chi_{19}^{(11)}$	-/A	-/D	-A	D	/E	/B	-/B	-C	-/E	-E	-1	E	C	-B	B	-E
$\chi_{19}^{(12)}$	-/A	/D	-A	-D	-/E	/B	-/B	C	/E	E	-1	-E	-C	-B	B	E
$\chi_{19}^{(13)}$	-A	D	-/A	-/D	-E	B	-B	-C	E	/E	-1	-/E	C	-/B	/B	/E
$\chi_{19}^{(14)}$	-A	-D	-/A	/D	E	B	-B	C	-E	-/E	-1	/E	-C	-/B	/B	-/E
$\chi_{19}^{(15)}$	-/B	-/E	-B	E	-D	A	-A	-C	D	/D	-1	-/D	C	-/A	/A	/D
$\chi_{19}^{(16)}$	-/B	/E	-B	-E	D	A	-A	C	-D	-/D	-1	/D	-C	-/A	/A	-/D
$\chi_{19}^{(17)}$	-B	E	-/B	-/E	/D	/A	-/A	-C	-/D	-D	-1	-D	C	A	-A	D
$\chi_{19}^{(18)}$	-B	-E	-/B	/E	-/D	/A	-/A	C	/D	D	-1	D	-C	A	-A	-D
$\chi_{19}^{(19)}$	-/A	-/D	-A	D	/E	/B	-/B	-C	-/E	-E	-1	-E	C	B	-B	E
$\chi_{19}^{(20)}$	-/A	/D	-A	-D	-/E	/B	-/B	C	/E	E	-1	E	-C	B	-B	-E
$\chi_{19}^{(21)}$	-A	D	-/A	-/D	-E	B	-B	-C	E	/E	-1	/E	C	/B	-/B	-/E
$\chi_{19}^{(22)}$	-A	-D	-/A	/D	E	B	-B	C	-E	-/E	-1	-/E	-C	/B	-/B	/E
$\chi_{19}^{(23)}$	-/B	-/E	-B	E	-D	A	-A	-C	D	/D	-1	/D	C	/A	-/A	-/D
$\chi_{19}^{(24)}$	-/B	/E	-B	-E	D	A	-A	C	-D	-/D	-1	-/D	-C	/A	-/A	/D
$\chi_{19}^{(25)}$	B	-B	/B	-/B	-/A	/A	/A	-1	-/A	-A	1	A	-1	-A	-A	A
$\chi_{19}^{(26)}$	/A	-/A	A	-A	-/B	/B	/B	-1	-/B	-B	1	B	-1	-B	-B	B
$\chi_{19}^{(27)}$	A	-A	/A	-/A	-B	B	B	-1	-B	-/B	1	/B	-1	-/B	-/B	/B
$\chi_{19}^{(28)}$	/B	-/B	B	-B	-A	A	A	-1	-A	-/A	1	/A	-1	-/A	-/A	/A
$\chi_{19}^{(29)}$	B	-B	/B	-/B	-/A	/A	/A	-1	-/A	-A	1	-A	-1	A	A	-A
$\chi_{19}^{(30)}$	/A	-/A	A	-A	-/B	/B	/B	-1	-/B	-B	1	-B	-1	B	B	-B
$\chi_{19}^{(31)}$	A	-A	/A	-/A	-B	B	B	-1	-B	-/B	1	-/B	-1	/B	/B	-/B
$\chi_{19}^{(32)}$	/B	-/B	B	-B	-A	A	A	-1	-A	-/A	1	-/A	-1	/A	/A	-/A
$\chi_{19}^{(33)}$	B	B	/B	/B	/A	/A	/A	1	/A	A	1	-A	1	-A	-A	-A
$\chi_{19}^{(34)}$	/A	/A	A	A	/B	/B	/B	1	/B	B	1	-B	1	-B	-B	-B
$\chi_{19}^{(35)}$	A	A	/A	/A	B	B	B	1	B	/B	1	-/B	1	-/B	-/B	-/B
$\chi_{19}^{(36)}$	/B	/B	B	B	A	A	A	1	A	/A	1	-/A	1	-/A	-/A	-/A
$\chi_{19}^{(37)}$	B	B	/B	/B	/A	/A	/A	1	/A	A	1	A	1	A	A	A
$\chi_{19}^{(38)}$	/A	/A	A	A	/B	/B	/B	1	/B	B	1	B	1	B	B	B
$\chi_{19}^{(39)}$	A	A	/A	/A	B	B	B	1	B	/B	1	/B	1	/B	/B	/B
$\chi_{19}^{(40)}$	/B	/B	B	B	A	A	A	1	A	/A	1	/A	1	/A	/A	/A

where $A = E(5)^3$, $B = E(5)$, $C = -E(4) = -ER(-1) = -i$, $D = -E(20)^{17}$, $E = -E(20)^9$.

The generators of $G^{s_{20}}$ are:

$$\begin{pmatrix} 1 & 0 & -1 & -1 & 2 & 0 & -1 & 0 \\ 0 & 0 & -1 & -1 & 3 & 0 & -2 & 0 \\ 1 & 1 & -2 & -2 & 4 & 0 & -2 & 0 \\ 1 & 1 & -2 & -3 & 6 & 0 & -3 & -1 \\ 1 & 1 & -1 & -3 & 5 & 0 & -3 & 0 \\ 1 & 0 & -1 & -2 & 4 & 0 & -2 & 0 \\ 1 & 0 & -1 & -1 & 2 & 1 & -2 & 0 \\ 0 & 0 & 0 & -1 & 1 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & -1 & 0 & 1 & -1 & 1 & 0 \\ 0 & 1 & -1 & 0 & 1 & -1 & 1 & 0 \\ 0 & 0 & -1 & 0 & 2 & -2 & 2 & 0 \\ 0 & 0 & -2 & 1 & 2 & -2 & 2 & 0 \\ 0 & 0 & -1 & 0 & 2 & -1 & 1 & 0 \\ 0 & 0 & -1 & 0 & 1 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 1 & -1 & 0 & -1 & 1 & 0 & 1 \\ 1 & 1 & -2 & 1 & -2 & 1 & 0 & 1 \\ 1 & 2 & -2 & 0 & -2 & 1 & 1 & 1 \\ 1 & 2 & -3 & 1 & -3 & 1 & 1 & 2 \\ 1 & 1 & -2 & 1 & -3 & 1 & 1 & 2 \\ 1 & 1 & -1 & 0 & -2 & 1 & 0 & 2 \\ 1 & 1 & -1 & 0 & -1 & 0 & 0 & 2 \\ 1 & 0 & -1 & 0 & 0 & 0 & 0 & 1 \end{pmatrix},$$

$$\begin{pmatrix} 1 & 1 & 0 & 0 & 0 & -1 & -1 & 1 \\ 3 & 1 & -1 & 0 & 0 & -1 & -1 & 1 \\ 3 & 1 & 0 & 0 & 0 & -2 & -1 & 1 \\ 5 & 1 & -1 & 0 & 1 & -3 & -2 & 2 \\ 4 & 1 & -1 & 0 & 1 & -3 & -1 & 1 \\ 3 & 1 & -1 & 0 & 1 & -2 & -1 & 0 \\ 2 & 1 & -1 & 0 & 1 & -2 & 0 & 0 \\ 1 & 0 & -1 & 1 & 0 & -1 & 0 & 0 \end{pmatrix}.$$

The representatives of conjugacy classes of $G^{s_{20}}$ are:

$$\begin{pmatrix} 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} -1 & -2 & 0 & 1 & 0 & 0 & 1 & 0 \\ -1 & -3 & 0 & 2 & -1 & 0 & 2 & -1 \\ -1 & -4 & -1 & 3 & -1 & 0 & 2 & 0 \\ -2 & -5 & -1 & 4 & -2 & 0 & 4 & -1 \\ -1 & -4 & -1 & 3 & -2 & 1 & 3 & -1 \\ -1 & -3 & 0 & 2 & -2 & 1 & 2 & 0 \\ -1 & -2 & 0 & 1 & -1 & 1 & 1 & 0 \\ 0 & -1 & 0 & 0 & 0 & 0 & 1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & -2 & 1 & 1 & -1 & 1 & 0 & 0 \\ -3 & -2 & 2 & 1 & -1 & 1 & 0 & 0 \\ -3 & -3 & 2 & 2 & -2 & 2 & -1 & 1 \\ -5 & -4 & 3 & 3 & -3 & 2 & 0 & 1 \\ -4 & -3 & 2 & 2 & -2 & 2 & 0 & 1 \\ -3 & -2 & 2 & 1 & -2 & 2 & 0 & 1 \\ -2 & -2 & 1 & 1 & -1 & 1 & 0 & 1 \\ -1 & -1 & 1 & 0 & 0 & 0 & 0 & 1 \end{pmatrix},$$

$$\begin{pmatrix} -1 & -2 & 1 & 1 & -1 & 1 & 0 & 0 \\ -1 & -3 & 1 & 2 & -2 & 1 & 1 & -1 \\ -1 & -4 & 1 & 3 & -3 & 2 & 0 & 0 \\ -2 & -5 & 2 & 4 & -5 & 3 & 1 & -1 \\ -1 & -4 & 1 & 3 & -4 & 3 & 1 & -1 \\ -1 & -3 & 1 & 2 & -3 & 2 & 1 & 0 \\ -1 & -2 & 1 & 1 & -2 & 2 & 0 & 0 \\ 0 & -1 & 1 & 0 & -1 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 0 & 0 & 0 & 1 & 1 & -1 \\ -3 & -1 & 1 & 0 & 0 & 1 & 1 & -1 \\ -3 & -1 & 0 & 0 & 0 & 2 & 1 & -1 \\ -5 & -1 & 1 & 0 & -1 & 3 & 2 & -2 \\ -4 & -1 & 1 & 0 & -1 & 3 & 1 & -1 \\ -3 & -1 & 1 & 0 & -1 & 2 & 1 & 0 \\ -2 & -1 & 1 & 0 & -1 & 2 & 0 & 0 \\ -1 & 0 & 1 & -1 & 0 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 0 & 1 & 0 & -1 & 0 & 1 \\ -2 & -1 & 1 & 0 & 1 & -1 & -1 & 2 \\ -2 & -1 & 0 & 1 & 1 & -2 & -1 & 3 \\ -3 & -1 & 1 & 0 & 2 & -3 & -1 & 4 \\ -3 & 0 & 1 & 0 & 1 & -2 & -1 & 3 \\ -2 & 0 & 1 & 0 & 1 & -2 & -1 & 2 \\ -1 & 0 & 0 & 0 & 1 & -1 & -1 & 1 \\ -1 & 0 & 0 & 0 & 1 & -1 & 0 & 0 \end{pmatrix},$$

$$\begin{pmatrix} -1 & -1 & 0 & 1 & 0 & -1 & 0 & 1 \\ 0 & -2 & 0 & 1 & 0 & -1 & 0 & 1 \\ 0 & -2 & -1 & 2 & 0 & -2 & 0 & 2 \\ 0 & -3 & 0 & 2 & 0 & -3 & 0 & 3 \\ 0 & -2 & 0 & 2 & -1 & -2 & 0 & 2 \\ 0 & -1 & 0 & 1 & 0 & -2 & 0 & 1 \\ 0 & -1 & 0 & 1 & 0 & -1 & -1 & 1 \\ 0 & -1 & 0 & 1 & 0 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 1 & 1 & -1 & 0 & -1 & 1 \\ -2 & -1 & 2 & 0 & 0 & 0 & -2 & 2 \\ -2 & -1 & 2 & 1 & -1 & 0 & -3 & 3 \\ -3 & -1 & 4 & 0 & -1 & 0 & -4 & 4 \\ -3 & 0 & 3 & 0 & -1 & 0 & -3 & 3 \\ -2 & 0 & 2 & 0 & 0 & -1 & -2 & 2 \\ -1 & 0 & 1 & 0 & 0 & 0 & -2 & 1 \\ -1 & 0 & 1 & 0 & 0 & 0 & -1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 1 & 1 & -1 & 0 & -1 & 1 \\ 0 & -2 & 1 & 1 & -1 & 0 & -1 & 1 \\ 0 & -2 & 1 & 2 & -2 & 0 & -2 & 2 \\ 0 & -3 & 2 & 2 & -2 & -1 & -2 & 3 \\ 0 & -2 & 1 & 2 & -2 & -1 & -1 & 2 \\ 0 & -1 & 1 & 1 & -1 & -1 & -1 & 1 \\ 0 & -1 & 0 & 1 & 0 & -1 & -1 & 1 \\ 0 & -1 & 0 & 1 & 0 & -1 & 0 & 0 \end{pmatrix},$$

$$\begin{pmatrix} 1 & 0 & -1 & -1 & 2 & 0 & -1 & 0 \\ 0 & 0 & -1 & -1 & 3 & 0 & -2 & 0 \\ 1 & 1 & -2 & -2 & 4 & 0 & -2 & 0 \\ 1 & 1 & -2 & -3 & 6 & 0 & -3 & -1 \\ 1 & 1 & -1 & -3 & 5 & 0 & -3 & 0 \\ 1 & 0 & -1 & -2 & 4 & 0 & -2 & 0 \\ 1 & 0 & -1 & -1 & 2 & 1 & -2 & 0 \\ 0 & 0 & 0 & -1 & 1 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & -1 & 0 & 1 & -1 & 1 & 0 \\ 0 & 1 & -1 & 0 & 1 & -1 & 1 & 0 \\ 0 & 0 & -1 & 0 & 2 & -2 & 2 & 0 \\ 0 & 0 & -2 & 1 & 2 & -2 & 2 & 0 \\ 0 & 0 & -1 & 0 & 2 & -1 & 1 & 0 \\ 0 & 0 & -1 & 0 & 1 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & -1 & 0 & 1 & -1 & 1 & 0 \\ 2 & 0 & -2 & 1 & 0 & -1 & 2 & -1 \\ 2 & -1 & -2 & 1 & 1 & -2 & 3 & -1 \\ 3 & -1 & -4 & 2 & 1 & -2 & 4 & -2 \\ 3 & -1 & -3 & 1 & 1 & -1 & 3 & -2 \\ 2 & -1 & -2 & 1 & 0 & 0 & 2 & -1 \\ 1 & 0 & -1 & 0 & 0 & 0 & 2 & -1 \\ 1 & 0 & -1 & 0 & 0 & 0 & 1 & 0 \end{pmatrix}, \\
\begin{pmatrix} -1 & -2 & 0 & 1 & 0 & 0 & 1 & 0 \\ -3 & -2 & 1 & 1 & 0 & 0 & 1 & 0 \\ -3 & -3 & 0 & 2 & 0 & 0 & 1 & 1 \\ -5 & -4 & 1 & 3 & -1 & 0 & 2 & 1 \\ -4 & -3 & 1 & 2 & -1 & 1 & 1 & 1 \\ -3 & -2 & 1 & 1 & -1 & 1 & 1 & 1 \\ -2 & -2 & 1 & 1 & -1 & 1 & 0 & 1 \\ -1 & -1 & 1 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 2 & 0 & -1 & 1 & -1 & 0 & 1 & -1 \\ 2 & -1 & 0 & 1 & -1 & 0 & 1 & -1 \\ 3 & -1 & -1 & 2 & -2 & 1 & 1 & -2 \\ 3 & -1 & -1 & 1 & -1 & 1 & 1 & -2 \\ 2 & -1 & -1 & 1 & -1 & 1 & 1 & -1 \\ 1 & 0 & 0 & 0 & -1 & 1 & 1 & -1 \\ 1 & 0 & 0 & 0 & -1 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 1 & -1 & -1 & 1 & 0 & 1 & -1 \\ 0 & 2 & -1 & -1 & 1 & 0 & 1 & -1 \\ 0 & 2 & -1 & -2 & 2 & 0 & 2 & -2 \\ 0 & 3 & -2 & -2 & 2 & 1 & 2 & -3 \\ 0 & 2 & -1 & -2 & 2 & 1 & 1 & -2 \\ 0 & 1 & -1 & -1 & 1 & 1 & 1 & -1 \\ 0 & 1 & 0 & -1 & 0 & 1 & 1 & -1 \\ 0 & 1 & 0 & -1 & 0 & 1 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 1 & 1 & -1 & 0 & 1 & -2 & 0 & 1 \\ 1 & 2 & -1 & -1 & 2 & -2 & -1 & 2 \\ 1 & 2 & -1 & -1 & 3 & -4 & 0 & 2 \\ 2 & 3 & -2 & -2 & 5 & -5 & -1 & 3 \\ 1 & 3 & -1 & -2 & 4 & -4 & -1 & 2 \\ 1 & 2 & -1 & -1 & 3 & -3 & -1 & 1 \\ 1 & 2 & -1 & -1 & 2 & -2 & 0 & 0 \\ 0 & 1 & -1 & 0 & 1 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 1 & -1 & 0 & 1 & -2 & 0 & 1 \\ 3 & 1 & -2 & 0 & 1 & -2 & 0 & 1 \\ 3 & 1 & -2 & 0 & 2 & -4 & 1 & 1 \\ 5 & 1 & -3 & 0 & 3 & -5 & 0 & 2 \\ 4 & 1 & -2 & 0 & 2 & -4 & 0 & 1 \\ 3 & 1 & -2 & 0 & 2 & -3 & 0 & 0 \\ 2 & 1 & -1 & 0 & 1 & -2 & 0 & 0 \\ 1 & 0 & -1 & 1 & 0 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 1 & 0 & 0 & 0 & -1 & -1 & 1 \\ 1 & 2 & 0 & -1 & 1 & -1 & -2 & 2 \\ 1 & 2 & 1 & -1 & 1 & -2 & -2 & 2 \\ 2 & 3 & 1 & -2 & 2 & -2 & -4 & 3 \\ 1 & 3 & 1 & -2 & 2 & -2 & -3 & 2 \\ 1 & 2 & 0 & -1 & 2 & -2 & -2 & 1 \\ 1 & 2 & 0 & -1 & 1 & -1 & -1 & 0 \\ 0 & 1 & 0 & 0 & 0 & 0 & -1 & 0 \end{pmatrix}, \\
\begin{pmatrix} 1 & 1 & 0 & 0 & 0 & -1 & -1 & 1 \\ 3 & 1 & -1 & 0 & 0 & -1 & -1 & 1 \\ 3 & 1 & 0 & 0 & 0 & -2 & -1 & 1 \\ 5 & 1 & -1 & 0 & 1 & -3 & -2 & 2 \\ 4 & 1 & -1 & 0 & 1 & -3 & -1 & 1 \\ 3 & 1 & -1 & 0 & 1 & -2 & -1 & 0 \\ 2 & 1 & -1 & 0 & 1 & -2 & 0 & 0 \\ 1 & 0 & -1 & 1 & 0 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 2 & -1 & -1 & 1 & -1 & 0 & 0 \\ 3 & 2 & -2 & -1 & 1 & -1 & 0 & 0 \\ 3 & 3 & -2 & -2 & 2 & -2 & 1 & -1 \\ 5 & 4 & -3 & -3 & 3 & -2 & 0 & -1 \\ 4 & 3 & -2 & -2 & 2 & -2 & 0 & -1 \\ 3 & 2 & -2 & -1 & 2 & -2 & 0 & -1 \\ 2 & 2 & -1 & -1 & 1 & -1 & 0 & -1 \\ 1 & 1 & -1 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}.
\end{pmatrix}$$

The character table of $G^{s_{20}}$:

	10										20													
$\chi_{20}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
$\chi_{20}^{(2)}$	1	1	1	-1	1	-1	1	1	-1	-1	1	1	-1	-1	-1	1	1	-1	-1	1	1	-1	-1	
$\chi_{20}^{(3)}$	1	1	1	-1	1	1	-1	-1	1	1	1	-1	-1	1	1	1	-1	-1	1	1	-1	1	1	
$\chi_{20}^{(4)}$	1	-1	1	1	1	1	1	-1	-1	-1	1	1	-1	-1	-1	1	1	-1	-1	1	1	-1	-1	
$\chi_{20}^{(5)}$	1	-1	1	1	1	-1	-1	1	1	1	-1	-1	1	1	1	-1	-1	1	1	-1	-1	1	1	
$\chi_{20}^{(6)}$	1	-1	1	-1	1	1	-1	1	-1	-1	1	-1	1	-1	-1	1	-1	1	-1	1	-1	1	-1	
$\chi_{20}^{(7)}$	1	-1	1	-1	1	-1	1	-1	1	1	-1	1	-1	1	1	-1	1	-1	1	-1	1	-1	1	
$\chi_{20}^{(8)}$	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
$\chi_{20}^{(9)}$	1	A	A	-A	A	-1	1	1	-1	-1	-/A	/A	/A	-/A	-/A	-/B	/B	/B	-/B	-B	B	B	-B	-/B
$\chi_{20}^{(10)}$	1	B	B	-B	B	-1	1	1	-1	-1	-/B	/B	/B	-/B	-/B	-A	A	A	-A	-/A	/A	/A	-/A	-A
$\chi_{20}^{(11)}$	1	/B	/B	-/B	/B	-1	1	1	-1	-1	-B	B	B	-B	-B	-/A	/A	/A	-/A	-A	A	A	-A	-/A
$\chi_{20}^{(12)}$	1	/A	/A	-/A	/A	-1	1	1	-1	-1	-A	A	A	-A	-A	-B	B	B	-B	-/B	/B	/B	-/B	-B
$\chi_{20}^{(13)}$	1	A	A	-A	A	1	-1	-1	1	1	/A	-/A	-/A	/A	/A	/B	-/B	-/B	/B	B	-B	-B	B	/B
$\chi_{20}^{(14)}$	1	B	B	-B	B	1	-1	-1	1	1	/B	-/B	-/B	/B	/B	A	-A	-A	A	/A	-/A	-/A	/A	A
$\chi_{20}^{(15)}$	1	/B	/B	-/B	/B	1	-1	-1	1	1	B	-B	-B	B	B	/A	-/A	-/A	/A	A	-A	-A	A	/A
$\chi_{20}^{(16)}$	1	/A	/A	-/A	/A	1	-1	-1	1	1	A	-A	-A	A	A	B	-B	-B	B	/B	-/B	-/B	/B	B
$\chi_{20}^{(17)}$	1	-A	A	A	A	1	1	-1	-1	-1	/A	/A	-/A	-/A	-/A	/B	/B	-/B	-/B	B	B	-B	-B	-/B
$\chi_{20}^{(18)}$	1	-B	B	B	B	1	1	-1	-1	-1	/B	/B	-/B	-/B	-/B	A	A	-A	-A	/A	/A	-/A	-/A	-A
$\chi_{20}^{(19)}$	1	-/B	/B	/B	/B	1	1	-1	-1	-1	B	B	-B	-B	-B	/A	/A	-/A	-/A	A	A	-A	-A	-/A
$\chi_{20}^{(20)}$	1	-/A	/A	/A	/A	1	1	-1	-1	-1	A	A	-A	-A	-A	B	B	-B	-B	/B	/B	-/B	-/B	-B
$\chi_{20}^{(21)}$	1	-A	A	A	A	-1	-1	1	1	1	-/A	-/A	/A	/A	/A	-/B	-/B	/B	/B	-B	-B	B	B	/B
$\chi_{20}^{(22)}$	1	-B	B	B	B	-1	-1	1	1	1	-/B	-/B	/B	/B	/B	-A	-A	A	A	-/A	-/A	/A	/A	A
$\chi_{20}^{(23)}$	1	-/B	/B	/B	/B	-1	-1	1	1	1	-B	-B	B	B	B	-/A	-/A	/A	/A	-A	-A	A	A	/A
$\chi_{20}^{(24)}$	1	-/A	/A	/A	/A	-1	-1	1	1	1	-A	-A	A	A	A	-B	-B	B	B	-/B	-/B	/B	/B	B
$\chi_{20}^{(25)}$	1	-A	A	-A	A	1	-1	1	-1	-1	/A	-/A	/A	-/A	-/A	/B	-/B	/B	-/B	B	-B	B	-B	-/B
$\chi_{20}^{(26)}$	1	-B	B	-B	B	1	-1	1	-1	-1	/B	-/B	/B	-/B	-/B	A	-A	A	-A	/A	-/A	/A	-/A	-A
$\chi_{20}^{(27)}$	1	-/B	/B	-/B	/B	1	-1	1	-1	-1	B	-B	B	-B	-B	/A	-/A	/A	-/A	A	-A	A	-A	-/A
$\chi_{20}^{(28)}$	1	-/A	/A	-/A	/A	1	-1	1	-1	-1	A	-A	A	-A	-A	B	-B	B	-B	/B	-/B	/B	-/B	-B
$\chi_{20}^{(29)}$	1	-A	A	-A	A	-1	1	-1	1	1	-/A	/A	-/A	/A	/A	-/B	/B	-/B	/B	-B	B	-B	B	/B
$\chi_{20}^{(30)}$	1	-B	B	-B	B	-1	1	-1	1	1	-/B	/B	-/B	/B	/B	-A	A	-A	A	-/A	/A	-/A	/A	A
$\chi_{20}^{(31)}$	1	-/B	/B	-/B	/B	-1	1	-1	1	1	-B	B	-B	B	B	-/A	/A	-/A	/A	-A	A	-A	A	/A
$\chi_{20}^{(32)}$	1	-/A	/A	-/A	/A	-1	1	-1	1	1	-A	A	-A	A	A	-B	B	-B	B	-/B	/B	-/B	/B	B
$\chi_{20}^{(33)}$	1	A	A	A	A	-1	-1	-1	-1	-1	-/A	-/A	-/A	-/A	-/A	-/B	-/B	-/B	-/B	-B	-B	-B	-B	-/B
$\chi_{20}^{(34)}$	1	B	B	B	B	-1	-1	-1	-1	-1	-/B	-/B	-/B	-/B	-/B	-A	-A	-A	-A	-/A	-/A	-/A	-/A	-A
$\chi_{20}^{(35)}$	1	/B	/B	/B	/B	-1	-1	-1	-1	-1	-B	-B	-B	-B	-B	-/A	-/A	-/A	-/A	-A	-A	-A	-A	-/A
$\chi_{20}^{(36)}$	1	/A	/A	/A	/A	-1	-1	-1	-1	-1	-A	-A	-A	-A	-A	-B	-B	-B	-B	-/B	-/B	-/B	-/B	-B
$\chi_{20}^{(37)}$	1	A	A	A	A	1	1	1	1	1	/A	/A	/A	/A	/A	/B	/B	/B	/B	B	B	B	B	/B
$\chi_{20}^{(38)}$	1	B	B	B	B	1	1	1	1	1	/B	/B	/B	/B	/B	A	A	A	A	/A	/A	/A	/A	A
$\chi_{20}^{(39)}$	1	/B	/B	/B	/B	1	1	1	1	1	B	B	B	B	B	/A	/A	/A	/A	A	A	A	A	/A
$\chi_{20}^{(40)}$	1	/A	/A	/A	/A	1	1	1	1	1	A	A	A	A	A	B	B	B	B	/B	/B	/B	/B	B
$\chi_{20}^{(41)}$	2	.	2	.	-2	.	.	.	-2	2	.	.	.	-2	2	.	.	.	-2	.	.	.	-2	2
$\chi_{20}^{(42)}$	2	.	2	.	-2	.	.	.	2	-2	.	.	.	2	-2	.	.	.	2	.	.	.	2	-2
$\chi_{20}^{(43)}$	2	.	C	.	-C	.	.	.	-2	2	.	.	.	-/C	/C	.	.	.	-/D	.	.	.	-D	/D
$\chi_{20}^{(44)}$	2	.	D	.	-D	.	.	.	-2	2	.	.	.	-/D	/D	.	.	.	-C	.	.	.	-/C	C
$\chi_{20}^{(45)}$	2	.	/D	.	-/D	.	.	.	-2	2	.	.	.	-D	D	.	.	.	-/C	.	.	.	-C	/C
$\chi_{20}^{(46)}$	2	.	/C	.	-/C	.	.	.	-2	2	.	.	.	-C	C	.	.	.	-D	.	.	.	-/D	D
$\chi_{20}^{(47)}$	2	.	C	.	-C	.	.	.	2	-2	.	.	.	/C	-/C	.	.	.	/D	.	.	.	D	-/D
$\chi_{20}^{(48)}$	2	.	D	.	-D	.	.	.	2	-2	.	.	.	/D	-/D	.	.	.	C	.	.	.	/C	-C
$\chi_{20}^{(49)}$	2	.	/D	.	-/D	.	.	.	2	-2	.	.	.	D	-D	.	.	.	/C	.	.	.	C	-/C
$\chi_{20}^{(50)}$	2	.	/C	.	-/C	.	.	.	2	-2	.	.	.	C	-C	.	.	.	D	.	.	.	/D	-D

	30												40											
$\chi_{20}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
$\chi_{20}^{(2)}$	-1	1	-1	1	-1	-1	1	1	-1	1	1	-1	1	1	-1	1	-1	1	-1	1	-1	1	1	
$\chi_{20}^{(3)}$	-1	1	1	1	-1	-1	1	1	-1	1	1	-1	1	1	-1	1	-1	1	-1	1	1	-1	-1	
$\chi_{20}^{(4)}$	-1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	1	1	1	-1	-1	-1	1	1	1	-1	
$\chi_{20}^{(5)}$	-1	-1	1	1	1	-1	-1	1	1	1	1	-1	-1	1	1	1	-1	-1	-1	1	1	-1	1	
$\chi_{20}^{(6)}$	1	-1	-1	1	-1	1	-1	1	-1	1	1	1	-1	1	-1	1	1	-1	1	-1	1	-1	1	
$\chi_{20}^{(7)}$	1	-1	1	1	-1	1	-1	1	-1	1	1	1	-1	1	-1	1	1	-1	1	-1	1	-1	-1	
$\chi_{20}^{(8)}$	1	1	-1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	
$\chi_{20}^{(9)}$	-B	B	-B	B	-B	-/B	/B	/B	-/B	B	/B	-/A	/A	/A	-/A	/A	-1	1	-A	-1	1	-A	A	
$\chi_{20}^{(10)}$	-/A	/A	-/A	/A	-/A	-A	A	A	-A	/A	A	-/B	/B	/B	-/B	/B	-1	1	-B	-1	1	-B	B	
$\chi_{20}^{(11)}$	-A	A	-A	A	-A	-/A	/A	/A	-/A	A	/A	-B	B	B	-B	B	-1	1	-/B	-1	1	-/B	/B	
$\chi_{20}^{(12)}$	-/B	/B	-/B	/B	-/B	-B	B	B	-B	/B	B	-A	A	A	-A	A	-1	1	-/A	-1	1	-/A	/A	
$\chi_{20}^{(13)}$	-B	B	B	B	-B	-/B	/B	/B	-/B	B	/B	-/A	/A	/A	-/A	/A	-1	1	-A	-1	1	A	-A	
$\chi_{20}^{(14)}$	-/A	/A	/A	/A	-/A	-A	A	A	-A	/A	A	-/B	/B	/B	-/B	/B	-1	1	-B	-1	1	B	-B	
$\chi_{20}^{(15)}$	-A	A	A	A	-A	-/A	/A	/A	-/A	A	/A	-B	B	B	-B	B	-1	1	-/B	-1	1	/B	-/B	
$\chi_{20}^{(16)}$	-/B	/B	/B	/B	-/B	-B	B	B	-B	/B	B	-A	A	A	-A	A	-1	1	-/A	-1	1	/A	-/A	
$\chi_{20}^{(17)}$	-B	-B	-B	B	B	-/B	-/B	/B	/B	B	/B	-/A	-/A	/A	/A	/A	-1	-1	-A	1	1	A	-A	
$\chi_{20}^{(18)}$	-/A	-/A	-/A	/A	/A	-A	-A	A	A	/A	A	-/B	-/B	/B	/B	/B	-1	-1	-B	1	1	B	-B	
$\chi_{20}^{(19)}$	-A	-A	-A	A	A	-/A	-/A	/A	/A	A	/A	-B	-B	B	B	B	-1	-1	-/B	1	1	/B	-/B	
$\chi_{20}^{(20)}$	-/B	-/B	-/B	/B	/B	-B	-B	B	B	/B	B	-A	-A	A	A	A	-1	-1	-/A	1	1	/A	-/A	
$\chi_{20}^{(21)}$	-B	-B	B	B	B	-/B	-/B	/B	/B	B	/B	-/A	-/A	/A	/A	/A	-1	-1	-A	1	1	-A	A	
$\chi_{20}^{(22)}$	-/A	-/A	/A	/A	/A	-A	-A	A	A	/A	A	-/B	-/B	/B	/B	/B	-1	-1	-B	1	1	-B	B	
$\chi_{20}^{(23)}$	-A	-A	A	A	A	-/A	-/A	/A	/A	A	/A	-B	-B	B	B	B	-1	-1	-/B	1	1	-/B	/B	
$\chi_{20}^{(24)}$	-/B	-/B	/B	/B	/B	-B	-B	B	B	/B	B	-A	-A	A	A	A	-1	-1	-/A	1	1	-/A	/A	
$\chi_{20}^{(25)}$	B	-B	-B	B	-B	/B	-/B	/B	-/B	B	/B	/A	-/A	/A	-/A	/A	1	-1	A	-1	1	A	-A	
$\chi_{20}^{(26)}$	/A	-/A	-/A	/A	-/A	A	-A	A	-A	/A	A	/B	-/B	/B	-/B	/B	1	-1	B	-1	1	B	-B	
$\chi_{20}^{(27)}$	A	-A	-A	A	-A	/A	-/A	/A	-/A	A	/A	B	-B	B	-B	B	1	-1	/B	-1	1	/B	/B	
$\chi_{20}^{(28)}$	/B	-/B	-/B	/B	-/B	B	-B	B	-B	/B	B	A	-A	A	-A	A	1	-1	/A	-1	1	/A	/A	
$\chi_{20}^{(29)}$	B	-B	B	B	-B	/B	-/B	/B	-/B	B	/B	/A	-/A	/A	-/A	/A	1	-1	A	-1	1	-A	-A	
$\chi_{20}^{(30)}$	/A	-/A	/A	/A	-/A	A	-A	A	-A	/A	A	/B	-/B	/B	-/B	/B	1	-1	B	-1	1	-B	-B	
$\chi_{20}^{(31)}$	A	-A	A	A	-A	/A	-/A	/A	-/A	A	/A	B	-B	B	-B	B	1	-1	/B	-1	1	-/B	-/B	
$\chi_{20}^{(32)}$	/B	-/B	/B	/B	-/B	B	-B	B	-B	/B	B	A	-A	A	-A	A	1	-1	/A	-1	1	-/A	-/A	
$\chi_{20}^{(33)}$	B	B	-B	B	B	/B	/B	/B	/B	B	/B	/A	/A	/A	/A	/A	1	1	A	1	1	-A	-A	
$\chi_{20}^{(34)}$	/A	/A	-/A	/A	/A	A	A	A	A	/A	A	/B	/B	/B	/B	/B	1	1	B	1	1	-B	-B	
$\chi_{20}^{(35)}$	A	A	-A	A	A	/A	/A	/A	/A	A	/A	B	B	B	B	B	1	1	/B	1	1	-/B	-/B	
$\chi_{20}^{(36)}$	/B	/B	-/B	/B	/B	B	B	B	B	/B	B	A	A	A	A	A	1	1	/A	1	1	-/A	-/A	
$\chi_{20}^{(37)}$	B	B	B	B	B	/B	/B	/B	/B	B	/B	/A	/A	/A	/A	/A	1	1	A	1	1	A	A	
$\chi_{20}^{(38)}$	/A	/A	/A	/A	/A	A	A	A	A	/A	A	/B	/B	/B	/B	/B	1	1	B	1	1	B	B	
$\chi_{20}^{(39)}$	A	A	A	A	A	/A	/A	/A	/A	A	/A	B	B	B	B	B	1	1	/B	1	1	/B	/B	
$\chi_{20}^{(40)}$	/B	/B	/B	/B	/B	B	B	B	B	/B	B	A	A	A	A	A	1	1	/A	1	1	/A	/A	
$\chi_{20}^{(41)}$	.	.	2	2	.	.	.	2	.	-2	-2	.	.	2	.	-2	.	.	.	.	-2	.	.
$\chi_{20}^{(42)}$	.	.	-2	2	.	.	.	2	.	-2	-2	.	.	2	.	-2	.	.	.	.	-2	.	.
$\chi_{20}^{(43)}$	.	.	D	D	.	.	.	/D	.	-D	-/D	.	.	/C	.	-/C	.	.	.	.	-2	.	.
$\chi_{20}^{(44)}$	.	.	/C	/C	.	.	.	C	.	-/C	-C	.	.	/D	.	-/D	.	.	.	.	-2	.	.
$\chi_{20}^{(45)}$	.	.	C	C	.	.	.	/C	.	-C	-/C	.	.	D	.	-D	.	.	.	.	-2	.	.
$\chi_{20}^{(46)}$	.	.	/D	/D	.	.	.	D	.	-/D	-D	.	.	C	.	-C	.	.	.	.	-2	.	.
$\chi_{20}^{(47)}$	.	.	-D	D	.	.	.	/D	.	-D	-/D	.	.	/C	.	-/C	.	.	.	.	-2	.	.
$\chi_{20}^{(48)}$	.	.	-/C	/C	.	.	.	C	.	-/C	-C	.	.	/D	.	-/D	.	.	.	.	-2	.	.
$\chi_{20}^{(49)}$	.	.	-C	C	.	.	.	/C	.	-C	-/C	.	.	D	.	-D	.	.	.	.	-2	.	.
$\chi_{20}^{(50)}$	.	.	-/D	/D	.	.	.	D	.	-/D	-D	.	.	C	.	-C	.	.	.	.	-2	.	.

	20	
$\chi_{20}^{(1)}$	1	1
$\chi_{20}^{(2)}$	-1	-1
$\chi_{20}^{(3)}$	1	1
$\chi_{20}^{(4)}$	-1	-1
$\chi_{20}^{(5)}$	1	1
$\chi_{20}^{(6)}$	-1	-1
$\chi_{20}^{(7)}$	1	1
$\chi_{20}^{(8)}$	-1	-1
$\chi_{20}^{(9)}$	-A	-A
$\chi_{20}^{(10)}$	-B	-B
$\chi_{20}^{(11)}$	-/B	-/B
$\chi_{20}^{(12)}$	-/A	-/A
$\chi_{20}^{(13)}$	A	A
$\chi_{20}^{(14)}$	B	B
$\chi_{20}^{(15)}$	/B	/B
$\chi_{20}^{(16)}$	/A	/A
$\chi_{20}^{(17)}$	-A	-A
$\chi_{20}^{(18)}$	-B	-B
$\chi_{20}^{(19)}$	-/B	-/B
$\chi_{20}^{(20)}$	-/A	-/A
$\chi_{20}^{(21)}$	A	A
$\chi_{20}^{(22)}$	B	B
$\chi_{20}^{(23)}$	/B	/B
$\chi_{20}^{(24)}$	/A	/A
$\chi_{20}^{(25)}$	-A	-A
$\chi_{20}^{(26)}$	-B	-B
$\chi_{20}^{(27)}$	-/B	-/B
$\chi_{20}^{(28)}$	-/A	-/A
$\chi_{20}^{(29)}$	A	A
$\chi_{20}^{(30)}$	B	B
$\chi_{20}^{(31)}$	/B	/B
$\chi_{20}^{(32)}$	/A	/A
$\chi_{20}^{(33)}$	-A	-A
$\chi_{20}^{(34)}$	-B	-B
$\chi_{20}^{(35)}$	-/B	-/B
$\chi_{20}^{(36)}$	-/A	-/A
$\chi_{20}^{(37)}$	A	A
$\chi_{20}^{(38)}$	B	B
$\chi_{20}^{(39)}$	/B	/B
$\chi_{20}^{(40)}$	/A	/A
$\chi_{20}^{(41)}$	-2	2
$\chi_{20}^{(42)}$	2	-2
$\chi_{20}^{(43)}$	-C	C
$\chi_{20}^{(44)}$	-D	D
$\chi_{20}^{(45)}$	-/D	/D
$\chi_{20}^{(46)}$	-/C	/C
$\chi_{20}^{(47)}$	C	-C
$\chi_{20}^{(48)}$	D	-D
$\chi_{20}^{(49)}$	/D	/D

$$\begin{pmatrix} 0 & 0 & -1 & 0 & 0 & 1 & 1 & -1 \\ 1 & 1 & -2 & 0 & 0 & 1 & 1 & -1 \\ 1 & 1 & -2 & -1 & 1 & 1 & 2 & -2 \\ 1 & 2 & -3 & -1 & 1 & 2 & 2 & -3 \\ 1 & 1 & -2 & -1 & 1 & 2 & 1 & -2 \\ 0 & 1 & -1 & -1 & 1 & 1 & 1 & -1 \\ 0 & 1 & 0 & -1 & 0 & 1 & 1 & -1 \\ 0 & 1 & 0 & -1 & 0 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 0 & -1 & 1 & -1 & 0 & 0 \\ -1 & 0 & 1 & -1 & 1 & -1 & 0 & 0 \\ -1 & 1 & 0 & -1 & 1 & -1 & 0 & 0 \\ -1 & 1 & 1 & -2 & 1 & -1 & 0 & 0 \\ -1 & 1 & 1 & -1 & 0 & -1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & -1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & -1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 1 & -2 & 2 & -1 & 1 & -1 \\ 1 & 0 & 1 & -3 & 3 & -1 & 0 & 0 \\ 1 & 0 & 1 & -4 & 4 & -1 & 1 & -1 \\ 2 & 0 & 2 & -6 & 5 & -1 & 1 & -1 \\ 2 & 0 & 2 & -5 & 4 & -1 & 1 & -1 \\ 2 & -1 & 1 & -3 & 3 & -1 & 1 & -1 \\ 1 & -1 & 1 & -2 & 2 & 0 & 0 & -1 \\ 1 & 0 & 0 & -1 & 1 & 0 & 0 & -1 \end{pmatrix}, \\
\begin{pmatrix} 0 & 1 & -2 & 1 & -1 & 1 & 0 & 0 \\ -1 & 1 & -2 & 2 & -2 & 1 & 1 & -1 \\ -1 & 2 & -3 & 2 & -2 & 1 & 1 & -1 \\ -2 & 3 & -4 & 3 & -3 & 2 & 1 & -2 \\ -2 & 2 & -3 & 3 & -3 & 2 & 0 & -1 \\ -2 & 2 & -2 & 2 & -2 & 1 & 0 & 0 \\ -1 & 2 & -1 & 1 & -2 & 1 & 0 & 0 \\ -1 & 1 & 0 & 0 & -1 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -1 & -1 & 1 & 0 & 0 & 1 & 0 \\ 1 & 0 & -2 & 1 & 0 & 0 & 1 & 0 \\ 1 & -1 & -2 & 1 & 1 & -1 & 2 & 0 \\ 1 & -1 & -3 & 2 & 1 & -1 & 2 & 0 \\ 1 & -1 & -2 & 1 & 1 & 0 & 1 & 0 \\ 0 & 0 & -1 & 0 & 1 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 0 & 0 & 1 & -2 & 0 & 1 \\ -1 & -1 & 1 & 0 & 1 & -2 & 0 & 1 \\ -1 & -1 & 0 & 1 & 1 & -3 & 0 & 2 \\ -1 & -2 & 1 & 1 & 1 & -4 & 0 & 3 \\ -1 & -1 & 1 & 1 & 0 & -3 & 0 & 2 \\ 0 & -1 & 0 & 1 & 0 & -2 & 0 & 1 \\ 0 & -1 & 0 & 1 & 0 & -1 & -1 & 1 \\ 0 & -1 & 0 & 1 & 0 & -1 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 0 & -1 & 1 & -1 & 2 & -2 & 1 & 0 \\ 1 & -1 & 1 & -2 & 3 & -2 & 0 & 1 \\ 1 & -2 & 1 & -2 & 4 & -3 & 1 & 1 \\ 2 & -3 & 2 & -3 & 5 & -4 & 1 & 2 \\ 2 & -2 & 2 & -3 & 4 & -3 & 1 & 1 \\ 2 & -2 & 1 & -2 & 3 & -2 & 1 & 0 \\ 1 & -2 & 1 & -1 & 2 & -1 & 0 & 0 \\ 1 & -1 & 0 & 0 & 1 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 & -2 & 2 & -1 & 0 & 0 & 1 \\ -1 & 0 & -2 & 3 & -2 & 0 & 1 & 0 \\ -1 & 0 & -3 & 4 & -2 & -1 & 1 & 1 \\ -2 & 0 & -4 & 6 & -3 & -1 & 1 & 1 \\ -2 & 0 & -3 & 5 & -3 & 0 & 0 & 1 \\ -2 & 1 & -2 & 3 & -2 & 0 & 0 & 1 \\ -1 & 1 & -1 & 2 & -2 & 0 & 0 & 1 \\ -1 & 0 & 0 & 1 & -1 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 1 & -1 & 1 & -2 & 2 & -1 & 0 \\ 1 & 2 & -2 & 1 & -2 & 2 & -1 & 0 \\ 1 & 3 & -2 & 1 & -3 & 3 & -2 & 0 \\ 1 & 4 & -3 & 2 & -4 & 4 & -3 & 0 \\ 1 & 3 & -3 & 2 & -3 & 3 & -3 & 1 \\ 0 & 3 & -2 & 1 & -2 & 2 & -2 & 1 \\ 0 & 2 & -1 & 1 & -2 & 1 & -1 & 1 \\ 0 & 1 & 0 & 0 & -1 & 1 & -1 & 1 \end{pmatrix}, \\
\begin{pmatrix} 0 & 0 & 2 & -2 & 1 & 0 & 0 & -1 \\ -1 & -1 & 3 & -2 & 1 & 0 & 0 & -1 \\ -1 & -1 & 4 & -3 & 1 & 1 & 0 & -2 \\ -1 & -2 & 6 & -4 & 1 & 1 & 0 & -2 \\ -1 & -2 & 5 & -3 & 1 & 0 & 1 & -2 \\ 0 & -2 & 3 & -2 & 1 & 0 & 1 & -2 \\ 0 & -2 & 2 & -1 & 1 & 0 & 0 & -1 \\ 0 & -1 & 1 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 1 & -1 & 0 & 0 & -1 & 0 \\ 1 & 1 & 1 & -2 & 1 & 0 & -2 & 1 \\ 1 & 2 & 1 & -2 & 0 & 1 & -3 & 1 \\ 2 & 2 & 2 & -3 & 0 & 1 & -4 & 2 \\ 2 & 2 & 1 & -2 & 0 & 0 & -3 & 2 \\ 2 & 1 & 0 & -1 & 0 & 0 & -2 & 1 \\ 1 & 0 & 0 & 0 & 0 & 0 & -2 & 1 \\ 1 & 0 & 0 & 0 & 0 & 0 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 0 & 0 & -1 & 2 & 0 & -1 \\ -1 & 0 & 0 & 1 & -2 & 2 & 1 & -2 \\ -1 & 0 & 1 & 0 & -2 & 3 & 1 & -3 \\ -2 & 0 & 1 & 1 & -3 & 4 & 1 & -4 \\ -2 & -1 & 1 & 1 & -2 & 3 & 1 & -3 \\ -2 & 0 & 1 & 0 & -1 & 2 & 1 & -2 \\ -1 & 0 & 1 & 0 & -1 & 1 & 1 & -1 \\ -1 & 0 & 1 & 0 & -1 & 1 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} -1 & 0 & 1 & 0 & 0 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 1 & 0 & 0 & -1 \\ 0 & 0 & 0 & 0 & 1 & -1 & 1 & -1 \\ 0 & 0 & 0 & 0 & 1 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & -1 & 0 & 1 & -1 & 0 & -1 & 1 \\ 0 & -2 & 1 & 1 & -1 & 0 & -1 & 1 \\ 0 & -2 & 1 & 2 & -2 & 0 & -2 & 2 \\ 0 & -3 & 2 & 2 & -2 & -1 & -2 & 3 \\ 0 & -2 & 1 & 2 & -2 & -1 & -1 & 2 \\ 0 & -1 & 1 & 1 & -2 & 0 & -1 & 2 \\ 0 & -1 & 0 & 1 & -1 & 0 & -1 & 2 \\ 0 & -1 & 0 & 1 & -1 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 1 & -2 & 1 & 0 & 0 & 0 & 0 & 0 \\ 2 & -2 & 1 & -1 & 1 & 0 & -1 & 1 \\ 2 & -3 & 2 & -1 & 1 & 0 & -1 & 1 \\ 3 & -4 & 3 & -2 & 2 & -1 & -1 & 2 \\ 3 & -3 & 2 & -2 & 2 & -1 & 0 & 1 \\ 2 & -2 & 2 & -2 & 1 & 0 & 0 & 1 \\ 1 & -2 & 1 & -1 & 1 & 0 & 0 & 1 \\ 1 & -1 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} 1 & -1 & 0 & 1 & -1 & 0 & -1 & 1 \\ 2 & -1 & 0 & 0 & 0 & 0 & -2 & 2 \\ 2 & -1 & 0 & 1 & -1 & 0 & -3 & 3 \\ 3 & -2 & 0 & 1 & -1 & 0 & -4 & 5 \\ 3 & -1 & -1 & 1 & -1 & 0 & -3 & 4 \\ 2 & 0 & 0 & 0 & -1 & 0 & -2 & 3 \\ 1 & 0 & 0 & 0 & 0 & -1 & -1 & 2 \\ 1 & 0 & 0 & 0 & 0 & -1 & 0 & 1 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 1 & 0 & 0 & 0 & 0 & 0 \\ -2 & 0 & 1 & 1 & -1 & 0 & 1 & -1 \\ -2 & -1 & 2 & 1 & -1 & 0 & 1 & -1 \\ -3 & -1 & 2 & 2 & -1 & -1 & 2 & -2 \\ -3 & -1 & 2 & 1 & 0 & -1 & 2 & -2 \\ -2 & -1 & 1 & 1 & 0 & 0 & 1 & -2 \\ -1 & -1 & 0 & 1 & 0 & 0 & 1 & -1 \\ -1 & -1 & 0 & 1 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 1 & 0 & 1 & -1 & 0 & -1 & 1 \\ 0 & 2 & -1 & 1 & -1 & 0 & -1 & 1 \\ 0 & 2 & -1 & 2 & -2 & 0 & -2 & 2 \\ 0 & 3 & -2 & 3 & -3 & 1 & -3 & 2 \\ 0 & 3 & -2 & 2 & -2 & 1 & -3 & 2 \\ 0 & 2 & -2 & 2 & -1 & 0 & -2 & 1 \\ 0 & 2 & -1 & 1 & -1 & 0 & -1 & 0 \\ 0 & 1 & 0 & 0 & 0 & 0 & -1 & 0 \end{pmatrix},$$

$$\begin{pmatrix} 0 & 2 & -1 & 0 & 0 & -1 & 1 & -1 \\ 1 & 3 & -2 & 0 & 0 & -1 & 0 & 0 \\ 1 & 4 & -3 & 0 & 0 & -1 & 1 & -1 \\ 2 & 6 & -4 & 0 & -1 & -1 & 1 & -1 \\ 2 & 5 & -3 & 0 & -1 & -1 & 1 & -1 \\ 2 & 3 & -3 & 1 & -1 & -1 & 1 & -1 \\ 1 & 2 & -2 & 1 & -1 & 0 & 0 & -1 \\ 1 & 1 & -1 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 0 & -1 & 1 & 1 & 0 & 0 \\ -1 & -2 & 1 & -1 & 1 & 1 & 1 & -1 \\ -1 & -2 & 1 & -2 & 2 & 1 & 1 & -1 \\ -2 & -3 & 2 & -3 & 3 & 2 & 1 & -2 \\ -2 & -3 & 2 & -2 & 2 & 2 & 0 & -1 \\ -2 & -2 & 2 & -2 & 2 & 1 & 0 & 0 \\ -1 & -1 & 2 & -2 & 1 & 1 & 0 & 0 \\ -1 & 0 & 1 & -1 & 0 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -1 & -1 & 1 & 0 & 0 & -1 & 2 \\ 1 & 0 & -2 & 1 & 0 & 0 & -2 & 3 \\ 1 & -1 & -2 & 1 & 1 & -1 & -2 & 4 \\ 1 & -1 & -3 & 2 & 1 & -1 & -4 & 6 \\ 1 & -1 & -2 & 1 & 1 & 0 & -4 & 5 \\ 0 & 0 & -1 & 0 & 1 & 0 & -3 & 4 \\ 0 & 0 & 0 & 0 & 0 & 0 & -2 & 3 \\ 0 & 0 & 0 & 0 & 0 & 0 & -1 & 2 \end{pmatrix}, \\
\begin{pmatrix} 0 & 0 & 0 & 0 & 1 & -2 & 2 & -1 \\ -1 & -1 & 1 & 0 & 1 & -2 & 3 & -2 \\ -1 & -1 & 0 & 1 & 1 & -3 & 4 & -2 \\ -1 & -2 & 1 & 1 & 1 & -4 & 6 & -3 \\ -1 & -1 & 1 & 1 & 0 & -3 & 5 & -3 \\ 0 & -1 & 0 & 1 & 0 & -2 & 4 & -3 \\ 0 & -1 & 0 & 1 & 0 & -1 & 2 & -2 \\ 0 & -1 & 0 & 1 & 0 & -1 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 1 & -1 & 1 & 0 & -2 & 1 & 0 \\ 1 & 2 & -2 & 1 & 0 & -2 & 0 & 1 \\ 1 & 2 & -3 & 2 & 0 & -3 & 1 & 1 \\ 2 & 3 & -4 & 3 & -1 & -4 & 1 & 2 \\ 2 & 3 & -3 & 2 & -1 & -3 & 1 & 1 \\ 2 & 2 & -3 & 2 & -1 & -2 & 1 & 0 \\ 1 & 1 & -2 & 2 & -1 & -1 & 0 & 0 \\ 1 & 0 & -1 & 1 & 0 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -2 & 0 & 0 & 1 & 0 & 0 & 1 \\ -1 & -3 & 1 & 0 & 1 & 0 & 1 & 0 \\ -1 & -4 & 1 & 0 & 2 & -1 & 1 & 1 \\ -2 & -6 & 2 & 0 & 3 & -1 & 1 & 1 \\ -2 & -5 & 2 & 0 & 2 & 0 & 0 & 1 \\ -2 & -3 & 2 & -1 & 2 & 0 & 0 & 1 \\ -1 & -2 & 2 & -1 & 1 & 0 & 0 & 1 \\ -1 & -1 & 1 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \\
\begin{pmatrix} 0 & -1 & 1 & -1 & 0 & 2 & -1 & 0 \\ 1 & -1 & 1 & -2 & 1 & 2 & -1 & 0 \\ 1 & -1 & 2 & -3 & 1 & 3 & -2 & 0 \\ 1 & -2 & 3 & -4 & 2 & 4 & -3 & 0 \\ 1 & -2 & 2 & -3 & 2 & 3 & -3 & 1 \\ 0 & -1 & 2 & -3 & 2 & 2 & -2 & 1 \\ 0 & -1 & 2 & -2 & 1 & 1 & -1 & 1 \\ 0 & 0 & 1 & -1 & 0 & 1 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 2 & 0 & 0 & -1 & 0 & 0 & -1 \\ -1 & 2 & 0 & 1 & -2 & 0 & 0 & -1 \\ -1 & 3 & 0 & 1 & -3 & 1 & 0 & -2 \\ -1 & 4 & 0 & 2 & -5 & 1 & 0 & -2 \\ -1 & 3 & 0 & 2 & -4 & 0 & 1 & -2 \\ 0 & 2 & -1 & 2 & -3 & 0 & 1 & -2 \\ 0 & 1 & -1 & 2 & -2 & 0 & 0 & -1 \\ 0 & 0 & 0 & 1 & -1 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 1 & -1 & 0 & 0 & 1 & -2 \\ 1 & 1 & 1 & -2 & 1 & 0 & 1 & -2 \\ 1 & 2 & 1 & -2 & 0 & 1 & 1 & -3 \\ 2 & 2 & 2 & -3 & 0 & 1 & 2 & -4 \\ 2 & 2 & 1 & -2 & 0 & 0 & 2 & -3 \\ 2 & 1 & 0 & -1 & 0 & 0 & 2 & -3 \\ 1 & 0 & 0 & 0 & 0 & 0 & 1 & -2 \\ 1 & 0 & 0 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \\
\begin{pmatrix} 0 & 0 & 0 & 0 & -1 & 2 & -2 & 1 \\ -1 & 0 & 0 & 1 & -2 & 2 & -2 & 1 \\ -1 & 0 & 1 & 0 & -2 & 3 & -3 & 1 \\ -2 & 0 & 1 & 1 & -3 & 4 & -5 & 2 \\ -2 & -1 & 1 & 1 & -2 & 3 & -4 & 2 \\ -2 & 0 & 1 & 0 & -1 & 2 & -3 & 2 \\ -1 & 0 & 1 & 0 & -1 & 1 & -2 & 2 \\ -1 & 0 & 1 & 0 & -1 & 1 & -1 & 1 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 1 & 0 & 0 & 0 & -2 & 2 \\ 0 & 1 & 0 & 0 & 0 & 0 & -3 & 3 \\ 0 & 0 & 1 & 0 & 0 & 0 & -4 & 4 \\ 0 & 0 & 0 & 1 & 0 & 0 & -6 & 6 \\ 0 & 0 & 0 & 0 & 1 & 0 & -5 & 5 \\ 0 & 0 & 0 & 0 & 1 & 0 & -4 & 3 \\ 0 & 0 & 0 & 0 & 1 & -1 & -2 & 2 \\ 0 & 0 & 0 & 0 & 1 & -1 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & -1 & 2 & -2 & 0 & 0 & 0 \\ 2 & 1 & -2 & 2 & -2 & 0 & -1 & 1 \\ 2 & 1 & -2 & 3 & -3 & 0 & -1 & 1 \\ 3 & 2 & -3 & 4 & -5 & 1 & -2 & 2 \\ 3 & 2 & -3 & 3 & -4 & 1 & -1 & 1 \\ 2 & 2 & -2 & 2 & -3 & 0 & 0 & 1 \\ 1 & 2 & -1 & 1 & -2 & 0 & 0 & 0 \\ 1 & 1 & 0 & 0 & -1 & 0 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} -1 & 1 & 0 & -1 & 1 & 0 & -1 & 1 \\ 0 & 2 & -1 & -1 & 1 & 0 & -2 & 2 \\ 0 & 2 & -1 & -2 & 2 & 0 & -2 & 2 \\ 0 & 3 & -2 & -2 & 2 & 1 & -4 & 3 \\ 0 & 2 & -1 & -2 & 2 & 1 & -4 & 3 \\ 0 & 1 & -1 & -1 & 2 & 0 & -3 & 2 \\ 0 & 1 & 0 & -1 & 1 & 0 & -2 & 1 \\ 0 & 1 & 0 & -1 & 1 & 0 & -1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 1 & 0 & -1 & 1 & 0 & -1 & 1 \\ 0 & 2 & -1 & -1 & 1 & 0 & -2 & 2 \\ 0 & 2 & -1 & -2 & 2 & 0 & -2 & 2 \\ 0 & 3 & -2 & -2 & 2 & 1 & -4 & 3 \\ 0 & 2 & -1 & -2 & 2 & 1 & -4 & 3 \\ 0 & 1 & -1 & -1 & 2 & 0 & -3 & 2 \\ 0 & 1 & 0 & -1 & 1 & 0 & -2 & 1 \\ 0 & 1 & 0 & -1 & 1 & 0 & -1 & 0 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} 0 & -1 & 1 & -1 & 1 & 1 & -1 & -1 \\ 1 & -1 & 1 & -2 & 2 & 1 & -1 & -1 \\ 1 & -1 & 2 & -3 & 2 & 2 & -2 & -1 \\ 1 & -2 & 3 & -4 & 3 & 3 & -3 & -1 \\ 1 & -2 & 2 & -3 & 3 & 2 & -3 & 0 \\ 0 & -1 & 2 & -3 & 3 & 1 & -2 & 0 \\ 0 & -1 & 2 & -2 & 2 & 0 & -1 & 0 \\ 0 & 0 & 1 & -1 & 1 & 0 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 1 & -1 & -1 & 1 & 1 & -1 \\ 1 & 1 & 1 & -2 & 0 & 1 & 1 & -1 \\ 1 & 2 & 1 & -2 & -1 & 2 & 1 & -2 \\ 2 & 2 & 2 & -3 & -1 & 2 & 2 & -3 \\ 2 & 2 & 1 & -2 & -1 & 1 & 2 & -2 \\ 2 & 1 & 0 & -1 & -1 & 1 & 2 & -2 \\ 1 & 0 & 0 & 0 & -1 & 1 & 1 & -1 \\ 1 & 0 & 0 & 0 & -1 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 2 & -1 & 0 & 0 & 0 & 1 \\ 1 & 0 & 2 & -2 & 0 & 0 & 0 & 2 \\ 1 & -1 & 3 & -2 & 0 & 0 & 0 & 2 \\ 1 & -1 & 4 & -3 & 0 & 0 & 0 & 4 \\ 1 & -1 & 3 & -3 & 1 & 0 & 0 & 3 \\ 0 & 0 & 3 & -3 & 1 & 0 & 0 & 2 \\ 0 & 0 & 2 & -2 & 1 & -1 & 1 & 1 \\ 0 & 0 & 1 & -1 & 1 & -1 & 0 & 1 \end{pmatrix}, \\
\begin{pmatrix} 0 & 0 & -1 & 2 & -1 & 0 & -1 & 0 \\ -1 & -1 & -1 & 3 & -1 & 0 & -1 & -1 \\ -1 & -1 & -1 & 4 & -2 & 0 & -2 & 0 \\ -1 & -2 & -2 & 6 & -2 & -1 & -2 & -1 \\ -1 & -1 & -2 & 5 & -2 & -1 & -1 & -1 \\ 0 & -1 & -2 & 4 & -2 & 0 & -1 & -1 \\ 0 & -1 & -2 & 3 & -1 & 0 & -1 & 0 \\ 0 & -1 & -1 & 2 & -1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 1 & 0 & -1 & 0 & -1 & 2 \\ 1 & 1 & 1 & -1 & -1 & 0 & -1 & 3 \\ 1 & 1 & 1 & 0 & -2 & 0 & -2 & 4 \\ 1 & 2 & 2 & -1 & -3 & 1 & -3 & 6 \\ 1 & 2 & 1 & -1 & -2 & 1 & -3 & 5 \\ 0 & 2 & 1 & -1 & -1 & 0 & -2 & 4 \\ 0 & 2 & 1 & -1 & -1 & 0 & -1 & 2 \\ 0 & 1 & 1 & -1 & 0 & 0 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 0 & 1 & 0 & 0 & 0 & -1 \\ -1 & -2 & 0 & 2 & 0 & 0 & 0 & -2 \\ -1 & -3 & 1 & 2 & 0 & 0 & 0 & -2 \\ -1 & -4 & 1 & 3 & 0 & 0 & 0 & -4 \\ -1 & -3 & 1 & 2 & 0 & 0 & 1 & -4 \\ 0 & -3 & 0 & 2 & 0 & 0 & 1 & -3 \\ 0 & -2 & 0 & 1 & 0 & 1 & 0 & -2 \\ 0 & -1 & 0 & 1 & -1 & 1 & 0 & -1 \end{pmatrix}, \\
\begin{pmatrix} 0 & 0 & 1 & -2 & 1 & 0 & 1 & 0 \\ 1 & 1 & 1 & -3 & 1 & 0 & 1 & 1 \\ 1 & 1 & 1 & -4 & 2 & 0 & 2 & 0 \\ 1 & 2 & 2 & -6 & 2 & 1 & 2 & 1 \\ 1 & 1 & 2 & -5 & 2 & 1 & 1 & 1 \\ 0 & 1 & 2 & -4 & 2 & 0 & 1 & 1 \\ 0 & 1 & 2 & -3 & 1 & 0 & 1 & 0 \\ 0 & 1 & 1 & -2 & 1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 1 & -2 & 1 & 0 & 0 & 0 & -1 \\ -1 & 0 & -2 & 2 & 0 & 0 & 0 & -2 \\ -1 & 1 & -3 & 2 & 0 & 0 & 0 & -2 \\ -1 & 1 & -4 & 3 & 0 & 0 & 0 & -4 \\ -1 & 1 & -3 & 3 & -1 & 0 & 0 & -3 \\ 0 & 0 & -3 & 3 & -1 & 0 & 0 & -2 \\ 0 & 0 & -2 & 2 & -1 & 1 & -1 & -1 \\ 0 & 0 & -1 & 1 & -1 & 1 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 1 & -1 & 1 & -1 & 1 & 1 \\ 1 & 0 & 1 & -2 & 1 & -1 & 1 & 2 \\ 1 & -1 & 1 & -2 & 2 & -2 & 2 & 2 \\ 1 & -1 & 2 & -3 & 2 & -2 & 2 & 4 \\ 1 & -1 & 2 & -3 & 2 & -1 & 1 & 3 \\ 0 & 0 & 2 & -3 & 2 & -1 & 1 & 2 \\ 0 & 0 & 2 & -2 & 1 & -1 & 1 & 1 \\ 0 & 0 & 1 & -1 & 1 & -1 & 0 & 1 \end{pmatrix}, \\
\begin{pmatrix} 0 & 0 & -2 & 2 & 0 & -1 & 0 & 0 \\ -1 & -1 & -2 & 3 & 0 & -1 & 0 & -1 \\ -1 & -1 & -3 & 4 & 0 & -2 & 0 & 0 \\ -1 & -2 & -4 & 6 & 0 & -3 & 0 & -1 \\ -1 & -1 & -3 & 5 & -1 & -2 & 0 & -1 \\ 0 & -1 & -3 & 4 & -1 & -1 & 0 & -1 \\ 0 & -1 & -2 & 3 & -1 & 0 & -1 & 0 \\ 0 & -1 & -1 & 2 & -1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 1 & -1 & -1 & 1 & -1 & 1 \\ 1 & 2 & 1 & -2 & -1 & 1 & -1 & 2 \\ 1 & 3 & 1 & -2 & -2 & 2 & -2 & 2 \\ 1 & 4 & 2 & -3 & -3 & 3 & -3 & 4 \\ 1 & 3 & 1 & -2 & -2 & 2 & -3 & 4 \\ 0 & 3 & 1 & -2 & -1 & 1 & -2 & 3 \\ 0 & 2 & 1 & -1 & -1 & 0 & -1 & 2 \\ 0 & 1 & 1 & -1 & 0 & 0 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 0 & 0 & 0 & 1 & 0 & -2 \\ -1 & -1 & 0 & 1 & 0 & 1 & 0 & -3 \\ -1 & -1 & 1 & 0 & 0 & 2 & 0 & -4 \\ -1 & -2 & 1 & 1 & 0 & 2 & 0 & -6 \\ -1 & -2 & 1 & 1 & 0 & 1 & 1 & -5 \\ 0 & -2 & 0 & 1 & 0 & 1 & 1 & -4 \\ 0 & -2 & 0 & 1 & 0 & 1 & 0 & -2 \\ 0 & -1 & 0 & 1 & -1 & 1 & 0 & -1 \end{pmatrix}, \\
\begin{pmatrix} 0 & -1 & -1 & 2 & -1 & 1 & -2 & 1 \\ 1 & 0 & -2 & 2 & -1 & 1 & -3 & 2 \\ 1 & -1 & -2 & 3 & -1 & 1 & -4 & 2 \\ 1 & -1 & -3 & 4 & -1 & 1 & -6 & 4 \\ 1 & -1 & -3 & 3 & 0 & 1 & -5 & 3 \\ 0 & 0 & -2 & 2 & 0 & 1 & -4 & 2 \\ 0 & 0 & -2 & 2 & 0 & 0 & -2 & 1 \\ 0 & 0 & -1 & 1 & 0 & 0 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 2 & -1 & 0 & -1 & 1 & 0 \\ -1 & -1 & 3 & -1 & 0 & -1 & 2 & -1 \\ -1 & -1 & 4 & -1 & -1 & -1 & 2 & 0 \\ -1 & -2 & 5 & -1 & -1 & -2 & 4 & -1 \\ -1 & -1 & 4 & -1 & -1 & -2 & 4 & -1 \\ 0 & -1 & 3 & -1 & -1 & -1 & 3 & -1 \\ 0 & -1 & 2 & -1 & 0 & -1 & 2 & 0 \\ 0 & -1 & 1 & 0 & 0 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -2 & 0 & 1 & 0 & 1 & -1 & 0 \\ 1 & -2 & 0 & 0 & 1 & 1 & -1 & 0 \\ 1 & -3 & 0 & 1 & 1 & 1 & -2 & 0 \\ 1 & -4 & 1 & 0 & 2 & 2 & -3 & 0 \\ 1 & -3 & 0 & 0 & 2 & 2 & -3 & 0 \\ 0 & -2 & 0 & 0 & 2 & 1 & -2 & 0 \\ 0 & -1 & 0 & 0 & 1 & 1 & -1 & -1 \\ 0 & 0 & 0 & 0 & 0 & 1 & -1 & 0 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} 0 & 0 & -2 & 1 & 0 & 1 & -1 & 0 \\ 1 & 1 & -3 & 1 & 0 & 1 & -2 & 1 \\ 1 & 1 & -4 & 1 & 1 & 1 & -2 & 0 \\ 1 & 2 & -5 & 1 & 1 & 2 & -4 & 1 \\ 1 & 1 & -4 & 1 & 1 & 2 & -4 & 1 \\ 0 & 1 & -3 & 1 & 1 & 1 & -3 & 1 \\ 0 & 1 & -2 & 1 & 0 & 1 & -2 & 0 \\ 0 & 1 & -1 & 0 & 0 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 1 & -2 & 1 & -1 & 2 & -1 \\ -1 & 0 & 2 & -2 & 1 & -1 & 3 & -2 \\ -1 & 1 & 2 & -3 & 1 & -1 & 4 & -2 \\ -1 & 1 & 3 & -4 & 1 & -1 & 6 & -4 \\ -1 & 1 & 3 & -3 & 0 & -1 & 5 & -3 \\ 0 & 0 & 2 & -2 & 0 & -1 & 4 & -2 \\ 0 & 0 & 2 & -2 & 0 & 0 & 2 & -1 \\ 0 & 0 & 1 & -1 & 0 & 0 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 0 & -1 & -2 & 2 & 0 & 0 & -1 & 1 \\ 1 & 0 & -3 & 2 & 0 & 0 & -2 & 2 \\ 1 & -1 & -4 & 3 & 1 & -1 & -2 & 2 \\ 1 & -1 & -5 & 4 & 1 & -1 & -4 & 4 \\ 1 & -1 & -4 & 3 & 1 & 0 & -4 & 3 \\ 0 & 0 & -3 & 2 & 1 & 0 & -3 & 2 \\ 0 & 0 & -2 & 2 & 0 & 0 & -2 & 1 \\ 0 & 0 & -1 & 1 & 0 & 0 & -1 & 1 \end{pmatrix}, \\
\begin{pmatrix} 0 & 0 & 1 & -1 & 1 & -2 & 2 & 0 \\ -1 & -1 & 2 & -1 & 1 & -2 & 3 & -1 \\ -1 & -1 & 2 & -1 & 1 & -3 & 4 & 0 \\ -1 & -2 & 3 & -1 & 1 & -4 & 6 & -1 \\ -1 & -1 & 3 & -1 & 0 & -3 & 5 & -1 \\ 0 & -1 & 2 & -1 & 0 & -2 & 4 & -1 \\ 0 & -1 & 2 & -1 & 0 & -1 & 2 & 0 \\ 0 & -1 & 1 & 0 & 0 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 0 & 0 & 0 & 2 & -1 & -1 \\ 1 & -1 & 0 & -1 & 1 & 2 & -1 & -1 \\ 1 & -1 & 0 & -1 & 1 & 3 & -2 & -2 \\ 1 & -2 & 1 & -2 & 2 & 4 & -3 & -2 \\ 1 & -2 & 0 & -1 & 2 & 3 & -3 & -1 \\ 0 & -1 & 0 & -1 & 2 & 2 & -2 & -1 \\ 0 & -1 & 0 & 0 & 1 & 1 & -1 & -1 \\ 0 & 0 & 0 & 0 & 0 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 0 & 1 & 0 & 0 & -2 & 1 \\ 1 & 0 & -1 & 1 & 0 & 0 & -3 & 2 \\ 1 & -1 & -1 & 2 & 0 & 0 & -4 & 2 \\ 1 & -1 & -2 & 3 & 0 & 0 & -6 & 4 \\ 1 & -1 & -2 & 2 & 1 & 0 & -5 & 3 \\ 0 & 0 & -1 & 1 & 1 & 0 & -4 & 2 \\ 0 & 0 & -1 & 1 & 1 & -1 & -2 & 1 \\ 0 & 0 & 0 & 0 & 1 & -1 & -1 & 1 \end{pmatrix}, \\
\begin{pmatrix} 0 & -2 & 1 & 0 & 1 & 0 & -1 & 0 \\ 1 & -2 & 1 & -1 & 2 & 0 & -1 & 0 \\ 1 & -3 & 1 & 0 & 2 & 0 & -2 & 0 \\ 1 & -4 & 2 & -1 & 3 & 1 & -3 & 0 \\ 1 & -3 & 1 & -1 & 3 & 1 & -3 & 0 \\ 0 & -2 & 1 & -1 & 3 & 0 & -2 & 0 \\ 0 & -1 & 1 & -1 & 2 & 0 & -1 & -1 \\ 0 & 0 & 1 & -1 & 1 & 0 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 & -1 & 0 & 1 & 0 & -1 & 0 \\ 1 & 1 & -2 & 0 & 1 & 0 & -2 & 1 \\ 1 & 1 & -3 & 0 & 2 & 0 & -2 & 0 \\ 1 & 2 & -4 & 0 & 2 & 1 & -4 & 1 \\ 1 & 1 & -3 & 0 & 2 & 1 & -4 & 1 \\ 0 & 1 & -2 & 0 & 2 & 0 & -3 & 1 \\ 0 & 1 & -1 & 0 & 1 & 0 & -2 & 0 \\ 0 & 1 & 0 & -1 & 1 & 0 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -1 & -1 & 1 & 1 & -1 & -1 & 1 \\ 1 & 0 & -2 & 1 & 1 & -1 & -2 & 2 \\ 1 & -1 & -3 & 2 & 2 & -2 & -2 & 2 \\ 1 & -1 & -4 & 3 & 2 & -2 & -4 & 4 \\ 1 & -1 & -3 & 2 & 2 & -1 & -4 & 3 \\ 0 & 0 & -2 & 1 & 2 & -1 & -3 & 2 \\ 0 & 0 & -1 & 1 & 1 & -1 & -2 & 1 \\ 0 & 0 & 0 & 0 & 1 & -1 & -1 & 1 \end{pmatrix}, \\
\begin{pmatrix} 0 & 0 & 0 & 0 & 0 & -1 & 2 & 0 \\ -1 & -1 & 1 & 0 & 0 & -1 & 3 & -1 \\ -1 & -1 & 1 & 0 & 0 & -2 & 4 & 0 \\ -1 & -2 & 2 & 0 & 0 & -3 & 6 & -1 \\ -1 & -1 & 2 & 0 & -1 & -2 & 5 & -1 \\ 0 & -1 & 1 & 0 & -1 & -1 & 4 & -1 \\ 0 & -1 & 1 & 0 & -1 & 0 & 2 & 0 \\ 0 & -1 & 0 & 1 & -1 & 0 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 1 & -1 & 1 & 1 & -1 & -1 \\ 1 & -1 & 1 & -2 & 2 & 1 & -1 & -1 \\ 1 & -1 & 1 & -2 & 2 & 2 & -2 & -2 \\ 1 & -2 & 2 & -3 & 3 & 3 & -3 & -2 \\ 1 & -2 & 1 & -2 & 3 & 2 & -3 & -1 \\ 0 & -1 & 1 & -2 & 3 & 1 & -2 & -1 \\ 0 & -1 & 1 & -1 & 2 & 0 & -1 & -1 \\ 0 & 0 & 1 & -1 & 1 & 0 & -1 & 0 \end{pmatrix}.
\end{pmatrix}$$

The character table of $G^{s_{21}}$:

	10										20											
$\chi_{21}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
$\chi_{21}^{(2)}$	1	1	1	1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	-1	-1	-1	-1
$\chi_{21}^{(3)}$	1	1	1	1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	1	1	1
$\chi_{21}^{(4)}$	1	1	1	1	-1	-1	-1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1
$\chi_{21}^{(5)}$	1	1	1	1	-1	-1	-1	1	1	1	1	1	1	1	1	-1	-1	-1	1	1	1	1
$\chi_{21}^{(6)}$	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_{21}^{(7)}$	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1
$\chi_{21}^{(8)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1
$\chi_{21}^{(9)}$	2	2	2	2	.	.	.	-2	-2	-2	-2	.	.	.	.	.	.	.	-2	-2	-2	-2
$\chi_{21}^{(10)}$	2	2	2	2	.	.	.	-2	-2	-2	-2	.	.	.	.	.	.	.	2	2	2	2
$\chi_{21}^{(11)}$	5	5	5	5	5	5	5	5	5	5	5	-5	-5	-5	-5	-5	-5	-5	3	3	3	3
$\chi_{21}^{(12)}$	5	5	5	5	5	5	5	5	5	5	5	-5	-5	-5	-5	-5	-5	-5	-3	-3	-3	-3
$\chi_{21}^{(13)}$	5	5	5	5	-5	-5	-5	5	5	5	5	-5	-5	-5	-5	5	5	5	3	3	3	3
$\chi_{21}^{(14)}$	5	5	5	5	-5	-5	-5	5	5	5	5	-5	-5	-5	-5	5	5	5	-3	-3	-3	-3
$\chi_{21}^{(15)}$	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	3	3	3	3
$\chi_{21}^{(16)}$	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	-3	-3	-3	-3
$\chi_{21}^{(17)}$	5	5	5	5	-5	-5	-5	5	5	5	5	5	5	5	5	-5	-5	-5	3	3	3	3
$\chi_{21}^{(18)}$	5	5	5	5	-5	-5	-5	5	5	5	5	5	5	5	5	-5	-5	-5	-3	-3	-3	-3
$\chi_{21}^{(19)}$	5	5	5	5	5	5	5	5	5	5	5	-5	-5	-5	-5	-5	-5	-5	1	1	1	1
$\chi_{21}^{(20)}$	5	5	5	5	5	5	5	5	5	5	5	-5	-5	-5	-5	-5	-5	-5	-1	-1	-1	-1
$\chi_{21}^{(21)}$	5	5	5	5	-5	-5	-5	5	5	5	5	-5	-5	-5	-5	5	5	5	1	1	1	1
$\chi_{21}^{(22)}$	5	5	5	5	-5	-5	-5	5	5	5	5	-5	-5	-5	-5	5	5	5	-1	-1	-1	-1
$\chi_{21}^{(23)}$	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	1	1	1	1
$\chi_{21}^{(24)}$	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	-1	-1	-1	-1
$\chi_{21}^{(25)}$	5	5	5	5	-5	-5	-5	5	5	5	5	5	5	5	5	-5	-5	-5	1	1	1	1
$\chi_{21}^{(26)}$	5	5	5	5	-5	-5	-5	5	5	5	5	5	5	5	5	-5	-5	-5	-1	-1	-1	-1
$\chi_{21}^{(27)}$	6	-6	-2	2	4	-4	.	6	-6	-2	2	-6	6	2	-2	-4	4	.	-4	4	2	-2
$\chi_{21}^{(28)}$	6	-6	-2	2	4	-4	.	6	-6	-2	2	-6	6	2	-2	-4	4	.	4	-4	-2	2
$\chi_{21}^{(29)}$	6	-6	-2	2	-4	4	.	6	-6	-2	2	-6	6	2	-2	4	-4	.	-4	4	2	-2
$\chi_{21}^{(30)}$	6	-6	-2	2	-4	4	.	6	-6	-2	2	-6	6	2	-2	4	-4	.	4	-4	-2	2
$\chi_{21}^{(31)}$	6	-6	-2	2	4	-4	.	6	-6	-2	2	6	-6	-2	2	4	-4	.	-4	4	2	-2
$\chi_{21}^{(32)}$	6	-6	-2	2	4	-4	.	6	-6	-2	2	6	-6	-2	2	4	-4	.	4	-4	-2	2
$\chi_{21}^{(33)}$	6	-6	-2	2	-4	4	.	6	-6	-2	2	6	-6	-2	2	-4	4	.	-4	4	2	-2
$\chi_{21}^{(34)}$	6	-6	-2	2	-4	4	.	6	-6	-2	2	6	-6	-2	2	-4	4	.	4	-4	-2	2
$\chi_{21}^{(35)}$	9	9	9	9	9	9	9	9	9	9	9	-9	-9	-9	-9	-9	-9	-9	-3	-3	-3	-3
$\chi_{21}^{(36)}$	9	9	9	9	9	9	9	9	9	9	9	-9	-9	-9	-9	-9	-9	-9	3	3	3	3
$\chi_{21}^{(37)}$	9	9	9	9	-9	-9	-9	9	9	9	9	-9	-9	-9	-9	9	9	9	-3	-3	-3	-3
$\chi_{21}^{(38)}$	9	9	9	9	-9	-9	-9	9	9	9	9	-9	-9	-9	-9	9	9	9	3	3	3	3
$\chi_{21}^{(39)}$	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	-3	-3	-3	-3
$\chi_{21}^{(40)}$	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	3	3	3	3
$\chi_{21}^{(41)}$	9	9	9	9	-9	-9	-9	9	9	9	9	9	9	9	9	-9	-9	-9	-3	-3	-3	-3
$\chi_{21}^{(42)}$	9	9	9	9	-9	-9	-9	9	9	9	9	9	9	9	9	-9	-9	-9	3	3	3	3
$\chi_{21}^{(43)}$	10	10	10	10	.	.	.	-10	-10	-10	-10	.	.	.	.	.	.	.	6	6	6	6
$\chi_{21}^{(44)}$	10	10	10	10	.	.	.	-10	-10	-10	-10	.	.	.	.	.	.	.	-6	-6	-6	-6
$\chi_{21}^{(45)}$	10	10	10	10	10	10	10	10	10	10	10	-10	-10	-10	-10	-10	-10	-10	2	2	2	2

	10										20												
$\chi_{21}^{(46)}$	10	10	10	10	10	10	10	10	10	10	10	-10	-10	-10	-10	-10	-10	-10	-2	-2	-2	-2	-2
$\chi_{21}^{(47)}$	10	10	10	10	-10	-10	-10	10	10	10	10	-10	-10	-10	-10	10	10	10	2	2	2	2	2
$\chi_{21}^{(48)}$	10	10	10	10	-10	-10	-10	10	10	10	10	-10	-10	-10	-10	10	10	10	-2	-2	-2	-2	-2
$\chi_{21}^{(49)}$	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	2	2	2	2	2
$\chi_{21}^{(50)}$	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	-2	-2	-2	-2	-2
$\chi_{21}^{(51)}$	10	10	10	10	-10	-10	-10	10	10	10	10	10	10	10	10	-10	-10	-10	2	2	2	2	2
$\chi_{21}^{(52)}$	10	10	10	10	-10	-10	-10	10	10	10	10	10	10	10	10	-10	-10	-10	-2	-2	-2	-2	-2
$\chi_{21}^{(53)}$	10	10	10	10	.	.	.	-10	-10	-10	-10	.	.	.	.	.	.	.	2	2	2	2	2
$\chi_{21}^{(54)}$	10	10	10	10	.	.	.	-10	-10	-10	-10	.	.	.	.	.	.	.	-2	-2	-2	-2	-2
$\chi_{21}^{(55)}$	12	-12	-4	4	.	.	.	-12	12	4	-4	.	.	.	.	.	.	.	-8	8	4	-4	.
$\chi_{21}^{(56)}$	12	-12	-4	4	.	.	.	-12	12	4	-4	.	.	.	.	.	.	.	8	-8	-4	4	.
$\chi_{21}^{(57)}$	15	15	-1	-1	-5	-5	3	15	15	-1	-1	-15	-15	1	1	5	5	-3	-5	-5	-1	-1	3
$\chi_{21}^{(58)}$	15	15	-1	-1	-5	-5	3	15	15	-1	-1	-15	-15	1	1	5	5	-3	-7	-7	1	1	1
$\chi_{21}^{(59)}$	15	15	-1	-1	-5	-5	3	15	15	-1	-1	-15	-15	1	1	5	5	-3	5	5	1	1	-3
$\chi_{21}^{(60)}$	15	15	-1	-1	-5	-5	3	15	15	-1	-1	-15	-15	1	1	5	5	-3	7	7	-1	-1	-1
$\chi_{21}^{(61)}$	15	15	-1	-1	5	5	-3	15	15	-1	-1	-15	-15	1	1	-5	-5	3	-5	-5	-1	-1	3
$\chi_{21}^{(62)}$	15	15	-1	-1	5	5	-3	15	15	-1	-1	-15	-15	1	1	-5	-5	3	-7	-7	1	1	1
$\chi_{21}^{(63)}$	15	15	-1	-1	5	5	-3	15	15	-1	-1	-15	-15	1	1	-5	-5	3	5	5	1	1	-3
$\chi_{21}^{(64)}$	15	15	-1	-1	5	5	-3	15	15	-1	-1	-15	-15	1	1	-5	-5	3	7	7	-1	-1	-1
$\chi_{21}^{(65)}$	15	15	-1	-1	-5	-5	3	15	15	-1	-1	15	15	-1	-1	-5	-5	3	-5	-5	-1	-1	3
$\chi_{21}^{(66)}$	15	15	-1	-1	-5	-5	3	15	15	-1	-1	15	15	-1	-1	-5	-5	3	-7	-7	1	1	1
$\chi_{21}^{(67)}$	15	15	-1	-1	-5	-5	3	15	15	-1	-1	15	15	-1	-1	-5	-5	3	5	5	1	1	-3
$\chi_{21}^{(68)}$	15	15	-1	-1	-5	-5	3	15	15	-1	-1	15	15	-1	-1	-5	-5	3	7	7	-1	-1	-1
$\chi_{21}^{(69)}$	15	15	-1	-1	5	5	-3	15	15	-1	-1	15	15	-1	-1	5	5	-3	-5	-5	-1	-1	3
$\chi_{21}^{(70)}$	15	15	-1	-1	5	5	-3	15	15	-1	-1	15	15	-1	-1	5	5	-3	-7	-7	1	1	1
$\chi_{21}^{(71)}$	15	15	-1	-1	5	5	-3	15	15	-1	-1	15	15	-1	-1	5	5	-3	5	5	1	1	-3
$\chi_{21}^{(72)}$	15	15	-1	-1	5	5	-3	15	15	-1	-1	15	15	-1	-1	5	5	-3	7	7	-1	-1	-1
$\chi_{21}^{(73)}$	16	16	16	16	16	16	16	16	16	16	16	-16	-16	-16	-16	-16	-16	-16	.	.	.	.	.
$\chi_{21}^{(74)}$	16	16	16	16	-16	-16	-16	16	16	16	16	-16	-16	-16	-16	16	16	16	.	.	.	.	.
$\chi_{21}^{(75)}$	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	.	.	.	.	.
$\chi_{21}^{(76)}$	16	16	16	16	-16	-16	-16	16	16	16	16	16	16	16	16	-16	-16	-16	.	.	.	.	.
$\chi_{21}^{(77)}$	18	18	18	18	.	.	.	-18	-18	-18	-18	.	.	.	.	.	.	.	-6	-6	-6	-6	-6
$\chi_{21}^{(78)}$	18	18	18	18	.	.	.	-18	-18	-18	-18	.	.	.	.	.	.	.	6	6	6	6	6
$\chi_{21}^{(79)}$	20	-20	4	-4	.	.	.	20	-20	4	-4	-20	20	-4	4	.	.	.	-8	8	-4	4	.
$\chi_{21}^{(80)}$	20	-20	4	-4	.	.	.	20	-20	4	-4	-20	20	-4	4	.	.	.	8	-8	4	-4	.
$\chi_{21}^{(81)}$	20	-20	4	-4	.	.	.	20	-20	4	-4	20	-20	4	-4	.	.	.	-8	8	-4	4	.
$\chi_{21}^{(82)}$	20	-20	4	-4	.	.	.	20	-20	4	-4	20	-20	4	-4	.	.	.	8	-8	4	-4	.
$\chi_{21}^{(83)}$	20	-20	4	-4	.	.	.	20	-20	4	-4	-20	20	-4	4	.	.	.	.	.	.	.	.
$\chi_{21}^{(84)}$	20	-20	4	-4	.	.	.	20	-20	4	-4	-20	20	-4	4	.	.	.	.	.	.	.	.
$\chi_{21}^{(85)}$	20	-20	4	-4	.	.	.	20	-20	4	-4	20	-20	4	-4	.	.	.	.	.	.	.	.
$\chi_{21}^{(86)}$	20	-20	4	-4	.	.	.	20	-20	4	-4	20	-20	4	-4	.	.	.	.	.	.	.	.
$\chi_{21}^{(87)}$	20	20	20	20	.	.	.	-20	-20	-20	-20	.	.	.	.	.	.	.	4	4	4	4	4
$\chi_{21}^{(88)}$	20	20	20	20	.	.	.	-20	-20	-20	-20	.	.	.	.	.	.	.	-4	-4	-4	-4	-4
$\chi_{21}^{(89)}$	20	-20	4	-4	.	.	.	-20	20	-4	4	.	.	.	.	.	.	.	-8	8	-4	4	.
$\chi_{21}^{(90)}$	20	-20	4	-4	.	.	.	-20	20	-4	4	.	.	.	.	.	.	.	-8	8	-4	4	.

	10																20					
$\chi_{21}^{(91)}$	20	-20	4	-4	.	.	.	-20	20	-4	4	.	.	.	.	.	.	8	-8	4	-4	.
$\chi_{21}^{(92)}$	20	-20	4	-4	.	.	.	-20	20	-4	4	.	.	.	.	.	.	8	-8	4	-4	.
$\chi_{21}^{(93)}$	24	-24	-8	8	16	-16	.	24	-24	-8	8	-24	24	8	-8	-16	16	8	-8	-4	4	.
$\chi_{21}^{(94)}$	24	-24	-8	8	16	-16	.	24	-24	-8	8	-24	24	8	-8	-16	16	-8	8	4	-4	.
$\chi_{21}^{(95)}$	24	-24	-8	8	-16	16	.	24	-24	-8	8	-24	24	8	-8	16	-16	8	-8	-4	4	.
$\chi_{21}^{(96)}$	24	-24	-8	8	-16	16	.	24	-24	-8	8	-24	24	8	-8	16	-16	-8	8	4	-4	.
$\chi_{21}^{(97)}$	24	-24	-8	8	16	-16	.	24	-24	-8	8	24	-24	-8	8	16	-16	8	-8	-4	4	.
$\chi_{21}^{(98)}$	24	-24	-8	8	16	-16	.	24	-24	-8	8	24	-24	-8	8	16	-16	-8	8	4	-4	.
$\chi_{21}^{(99)}$	24	-24	-8	8	-16	16	.	24	-24	-8	8	24	-24	-8	8	-16	16	8	-8	-4	4	.
$\chi_{21}^{(100)}$	24	-24	-8	8	-16	16	.	24	-24	-8	8	24	-24	-8	8	-16	16	-8	8	4	-4	.
$\chi_{21}^{(101)}$	30	-30	-10	10	20	-20	.	30	-30	-10	10	-30	30	10	-10	-20	20	4	-4	-2	2	.
$\chi_{21}^{(102)}$	30	-30	-10	10	20	-20	.	30	-30	-10	10	-30	30	10	-10	-20	20	-4	4	2	-2	.
$\chi_{21}^{(103)}$	30	-30	-10	10	-20	20	.	30	-30	-10	10	-30	30	10	-10	20	-20	4	-4	-2	2	.
$\chi_{21}^{(104)}$	30	-30	-10	10	-20	20	.	30	-30	-10	10	-30	30	10	-10	20	-20	-4	4	2	-2	.
$\chi_{21}^{(105)}$	30	-30	-10	10	20	-20	.	30	-30	-10	10	30	-30	-10	10	20	-20	4	-4	-2	2	.
$\chi_{21}^{(106)}$	30	-30	-10	10	20	-20	.	30	-30	-10	10	30	-30	-10	10	20	-20	-4	4	2	-2	.
$\chi_{21}^{(107)}$	30	-30	-10	10	-20	20	.	30	-30	-10	10	30	-30	-10	10	-20	20	4	-4	-2	2	.
$\chi_{21}^{(108)}$	30	-30	-10	10	-20	20	.	30	-30	-10	10	30	-30	-10	10	-20	20	-4	4	2	-2	.
$\chi_{21}^{(109)}$	30	30	-2	-2	.	.	.	-30	-30	2	2	.	.	.	.	.	.	-10	-10	-2	-2	6
$\chi_{21}^{(110)}$	30	30	-2	-2	.	.	.	-30	-30	2	2	.	.	.	.	.	.	-14	-14	2	2	2
$\chi_{21}^{(111)}$	30	30	-2	-2	.	.	.	-30	-30	2	2	.	.	.	.	.	.	10	10	2	2	-6
$\chi_{21}^{(112)}$	30	30	-2	-2	.	.	.	-30	-30	2	2	.	.	.	.	.	.	14	14	-2	-2	-2
$\chi_{21}^{(113)}$	30	30	-2	-2	-10	-10	6	30	30	-2	-2	-30	-30	2	2	10	10	-6	-2	-2	2	-2
$\chi_{21}^{(114)}$	30	30	-2	-2	-10	-10	6	30	30	-2	-2	-30	-30	2	2	10	10	-6	2	2	-2	2
$\chi_{21}^{(115)}$	30	30	-2	-2	10	10	-6	30	30	-2	-2	-30	-30	2	2	-10	-10	6	-2	-2	2	-2
$\chi_{21}^{(116)}$	30	30	-2	-2	10	10	-6	30	30	-2	-2	-30	-30	2	2	-10	-10	6	2	2	-2	2
$\chi_{21}^{(117)}$	30	30	-2	-2	-10	-10	6	30	30	-2	-2	30	30	-2	-2	-10	-10	6	-2	-2	2	-2
$\chi_{21}^{(118)}$	30	30	-2	-2	-10	-10	6	30	30	-2	-2	30	30	-2	-2	-10	-10	6	2	2	-2	2
$\chi_{21}^{(119)}$	30	30	-2	-2	10	10	-6	30	30	-2	-2	30	30	-2	-2	10	10	-6	-2	-2	2	-2
$\chi_{21}^{(120)}$	30	30	-2	-2	10	10	-6	30	30	-2	-2	30	30	-2	-2	10	10	-6	2	2	-2	2
$\chi_{21}^{(121)}$	32	32	32	32	.	.	.	-32	-32	-32	-32	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(122)}$	36	-36	-12	12	24	-24	.	36	-36	-12	12	-36	36	12	-12	-24	24	.	.	.	.	.
$\chi_{21}^{(123)}$	36	-36	-12	12	-24	24	.	36	-36	-12	12	-36	36	12	-12	24	-24	.	.	.	.	.
$\chi_{21}^{(124)}$	36	-36	-12	12	24	-24	.	36	-36	-12	12	36	-36	-12	12	24	-24	.	.	.	.	.
$\chi_{21}^{(125)}$	36	-36	-12	12	-24	24	.	36	-36	-12	12	36	-36	-12	12	-24	24	.	.	.	.	.
$\chi_{21}^{(126)}$	40	-40	8	-8	.	.	.	40	-40	8	-8	-40	40	-8	8	.	.	-8	8	-4	4	.
$\chi_{21}^{(127)}$	40	-40	8	-8	.	.	.	40	-40	8	-8	-40	40	-8	8	.	.	-8	8	-4	4	.
$\chi_{21}^{(128)}$	40	-40	8	-8	.	.	.	40	-40	8	-8	-40	40	-8	8	.	.	8	-8	4	-4	.
$\chi_{21}^{(129)}$	40	-40	8	-8	.	.	.	40	-40	8	-8	-40	40	-8	8	.	.	8	-8	4	-4	.
$\chi_{21}^{(130)}$	40	-40	8	-8	.	.	.	40	-40	8	-8	40	-40	8	-8	.	.	-8	8	-4	4	.
$\chi_{21}^{(131)}$	40	-40	8	-8	.	.	.	40	-40	8	-8	40	-40	8	-8	.	.	-8	8	-4	4	.
$\chi_{21}^{(132)}$	40	-40	8	-8	.	.	.	40	-40	8	-8	40	-40	8	-8	.	.	8	-8	4	-4	.
$\chi_{21}^{(133)}$	40	-40	8	-8	.	.	.	40	-40	8	-8	40	-40	8	-8	.	.	8	-8	4	-4	.
$\chi_{21}^{(134)}$	40	-40	8	-8	.	.	.	-40	40	-8	8	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(135)}$	45	45	-3	-3	-15	-15	9	45	45	-3	-3	-45	-45	3	3	15	15	-9	9	9	-3	-3

	10										20																			
$\chi_{21}^{(136)}$	45	45	-3	-3	-15	-15	9	45	45	-3	-3	-45	-45	3	3	15	15	-9	-9	-9	3	3	-1							
$\chi_{21}^{(137)}$	45	45	-3	-3	15	15	-9	45	45	-3	-3	-45	-45	3	3	-15	-15	9	9	9	-3	-3	1							
$\chi_{21}^{(138)}$	45	45	-3	-3	15	15	-9	45	45	-3	-3	-45	-45	3	3	-15	-15	9	-9	-9	3	3	-1							
$\chi_{21}^{(139)}$	45	45	-3	-3	-15	-15	9	45	45	-3	-3	45	45	-3	-3	-15	-15	9	9	9	-3	-3	1							
$\chi_{21}^{(140)}$	45	45	-3	-3	-15	-15	9	45	45	-3	-3	45	45	-3	-3	-15	-15	9	-9	-9	3	3	-1							
$\chi_{21}^{(141)}$	45	45	-3	-3	15	15	-9	45	45	-3	-3	45	45	-3	-3	15	15	-9	9	9	-3	-3	1							
$\chi_{21}^{(142)}$	45	45	-3	-3	15	15	-9	45	45	-3	-3	45	45	-3	-3	15	15	-9	-9	-9	3	3	-1							
$\chi_{21}^{(143)}$	45	45	-3	-3	-15	-15	9	45	45	-3	-3	-45	-45	3	3	15	15	-9	-3	-3	-3	-3	5							
$\chi_{21}^{(144)}$	45	45	-3	-3	-15	-15	9	45	45	-3	-3	-45	-45	3	3	15	15	-9	3	3	3	3	-5							
$\chi_{21}^{(145)}$	45	45	-3	-3	15	15	-9	45	45	-3	-3	-45	-45	3	3	-15	-15	9	-3	-3	-3	-3	5							
$\chi_{21}^{(146)}$	45	45	-3	-3	15	15	-9	45	45	-3	-3	-45	-45	3	3	-15	-15	9	3	3	3	3	-5							
$\chi_{21}^{(147)}$	45	45	-3	-3	-15	-15	9	45	45	-3	-3	45	45	-3	-3	-15	-15	9	-3	-3	-3	-3	5							
$\chi_{21}^{(148)}$	45	45	-3	-3	-15	-15	9	45	45	-3	-3	45	45	-3	-3	-15	-15	9	3	3	3	3	-5							
$\chi_{21}^{(149)}$	45	45	-3	-3	15	15	-9	45	45	-3	-3	45	45	-3	-3	15	15	-9	-3	-3	-3	-3	5							
$\chi_{21}^{(150)}$	45	45	-3	-3	15	15	-9	45	45	-3	-3	45	45	-3	-3	15	15	-9	3	3	3	3	-5							
$\chi_{21}^{(151)}$	48	-48	-16	16	.	.	.	-48	48	16	-16	.	.	.	.	.	.	16	-16	-8	8	.		
$\chi_{21}^{(152)}$	48	-48	-16	16	.	.	.	-48	48	16	-16	.	.	.	.	.	.	-16	16	8	-8	.		
$\chi_{21}^{(153)}$	60	-60	-20	20	.	.	.	-60	60	20	-20	.	.	.	.	.	.	8	-8	-4	4	.		
$\chi_{21}^{(154)}$	60	-60	-20	20	.	.	.	-60	60	20	-20	.	.	.	.	.	.	-8	8	4	-4	.		
$\chi_{21}^{(155)}$	60	60	-4	-4	.	.	.	-60	-60	4	4	.	.	.	.	.	.	-4	-4	4	4	-4		
$\chi_{21}^{(156)}$	60	60	-4	-4	.	.	.	-60	-60	4	4	.	.	.	.	.	.	4	4	-4	-4	4		
$\chi_{21}^{(157)}$	72	-72	-24	24	.	.	.	-72	72	24	-24	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(158)}$	80	-80	16	-16	.	.	.	-80	80	-16	16	.	.	.	.	.	.	-16	16	-8	8	.		
$\chi_{21}^{(159)}$	80	-80	16	-16	.	.	.	-80	80	-16	16	.	.	.	.	.	.	16	-16	8	-8	.		
$\chi_{21}^{(160)}$	80	-80	16	-16	.	.	.	80	-80	16	-16	-80	80	-16	16								
$\chi_{21}^{(161)}$	80	-80	16	-16	.	.	.	80	-80	16	-16	80	-80	16	-16								
$\chi_{21}^{(162)}$	80	-80	16	-16	.	.	.	-80	80	-16	16	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(163)}$	80	-80	16	-16	.	.	.	-80	80	-16	16	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(164)}$	90	90	-6	-6	.	.	.	-90	-90	6	6	.	.	.	.	.	.	18	18	-6	-6	2		
$\chi_{21}^{(165)}$	90	90	-6	-6	.	.	.	-90	-90	6	6	.	.	.	.	.	.	-18	-18	6	6	-2		
$\chi_{21}^{(166)}$	90	90	-6	-6	.	.	.	-90	-90	6	6	.	.	.	.	.	.	-6	-6	-6	-6	10		
$\chi_{21}^{(167)}$	90	90	-6	-6	.	.	.	-90	-90	6	6	.	.	.	.	.	.	6	6	6	6	-10		
	30										40										50									
$\chi_{21}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
$\chi_{21}^{(2)}$	1	1	1	1	1	-1	-1	-1	-1	-1	1	1	1	1	1	-1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	
$\chi_{21}^{(3)}$	-1	-1	-1	-1	-1	1	1	1	1	1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	1		
$\chi_{21}^{(4)}$	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	1		
$\chi_{21}^{(5)}$	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1		
$\chi_{21}^{(6)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
$\chi_{21}^{(7)}$	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1		
$\chi_{21}^{(8)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1		
$\chi_{21}^{(9)}$	2	2	2	2	2	2	2	2	2	-2		
$\chi_{21}^{(10)}$	-2	-2	-2	-2	-2	2	2	2	2	-2		
$\chi_{21}^{(11)}$	3	3	3	3	3	3	3	3	3	3	-3	-3	-3	-3	-3	-3	-3	-3	-3	2	2	2	2	2	2	2	2	2		
$\chi_{21}^{(12)}$	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2	2	2	2		
$\chi_{21}^{(13)}$	-3	-3	-3	-3	-3	3	3	3	3	3	-3	-3	-3	-3	-3	3	3	3	3	3	2	2	2	2	-2	-2	-2	-2	2	

	30										40										50									
$\chi_{21}^{(14)}$	3	3	3	3	3	-3	-3	-3	-3	-3	3	3	3	3	3	-3	-3	-3	-3	-3	2	2	2	2	-2	-2	-2	-2	2	
$\chi_{21}^{(15)}$	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2	2	2	2	
$\chi_{21}^{(16)}$	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	2	2	2	2	2	2	2	2	2	
$\chi_{21}^{(17)}$	-3	-3	-3	-3	-3	3	3	3	3	3	3	3	3	3	3	-3	-3	-3	-3	-3	2	2	2	2	-2	-2	-2	-2	2	
$\chi_{21}^{(18)}$	3	3	3	3	3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	3	3	3	3	3	2	2	2	2	-2	-2	-2	-2	2	
$\chi_{21}^{(19)}$	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
$\chi_{21}^{(20)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
$\chi_{21}^{(21)}$	-1	-1	-1	-1	-1	1	1	1	1	1	-1	-1	-1	-1	-1	1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	
$\chi_{21}^{(22)}$	1	1	1	1	1	-1	-1	-1	-1	-1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	-1	
$\chi_{21}^{(23)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
$\chi_{21}^{(24)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
$\chi_{21}^{(25)}$	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	-1	
$\chi_{21}^{(26)}$	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	
$\chi_{21}^{(27)}$	-2	2	4	-4	.	-4	4	2	-2	.	4	-4	-2	2	.	2	-2	-4	4	.	3	-3	-1	1	1	-1	-3	3	3	
$\chi_{21}^{(28)}$	2	-2	-4	4	.	4	-4	-2	2	.	-4	4	2	-2	.	-2	2	4	-4	.	3	-3	-1	1	1	-1	-3	3	3	
$\chi_{21}^{(29)}$	2	-2	-4	4	.	-4	4	2	-2	.	4	-4	-2	2	.	-2	2	4	-4	.	3	-3	-1	1	-1	1	3	-3	3	
$\chi_{21}^{(30)}$	-2	2	4	-4	.	4	-4	-2	2	.	-4	4	2	-2	.	2	-2	-4	4	.	3	-3	-1	1	-1	1	3	-3	3	
$\chi_{21}^{(31)}$	-2	2	4	-4	.	-4	4	2	-2	.	-4	4	2	-2	.	-2	2	4	-4	.	3	-3	-1	1	1	-1	-3	3	3	
$\chi_{21}^{(32)}$	2	-2	-4	4	.	4	-4	-2	2	.	4	-4	-2	2	.	2	-2	-4	4	.	3	-3	-1	1	1	-1	-3	3	3	
$\chi_{21}^{(33)}$	2	-2	-4	4	.	-4	4	2	-2	.	-4	4	2	-2	.	2	-2	-4	4	.	3	-3	-1	1	-1	1	3	-3	3	
$\chi_{21}^{(34)}$	-2	2	4	-4	.	4	-4	-2	2	.	4	-4	-2	2	.	-2	2	4	-4	.	3	-3	-1	1	-1	1	3	-3	3	
$\chi_{21}^{(35)}$	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	3	3	3	3	3	3	3	3	3	3	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(36)}$	3	3	3	3	3	3	3	3	3	3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(37)}$	3	3	3	3	3	-3	-3	-3	-3	-3	3	3	3	3	3	-3	-3	-3	-3	-3	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(38)}$	-3	-3	-3	-3	-3	3	3	3	3	3	-3	-3	-3	-3	-3	3	3	3	3	3	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(39)}$	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(40)}$	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(41)}$	3	3	3	3	3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	3	3	3	3	3	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(42)}$	-3	-3	-3	-3	-3	3	3	3	3	3	3	3	3	3	3	-3	-3	-3	-3	-3	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(43)}$	.	.	.	.	.	-6	-6	-6	-6	-6	.	.	.	.	.	.	.	.	.	.	4	4	4	4	.	.	.	.	-4
$\chi_{21}^{(44)}$	.	.	.	.	.	6	6	6	6	6	.	.	.	.	.	.	.	.	.	.	4	4	4	4	.	.	.	.	-4
$\chi_{21}^{(45)}$	2	2	2	2	2	2	2	2	2	2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	1	1	1	1	1	1	1	1	1	
$\chi_{21}^{(46)}$	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	
$\chi_{21}^{(47)}$	-2	-2	-2	-2	-2	2	2	2	2	2	-2	-2	-2	-2	-2	2	2	2	2	2	1	1	1	1	-1	-1	-1	-1	1	
$\chi_{21}^{(48)}$	2	2	2	2	2	-2	-2	-2	-2	-2	2	2	2	2	2	-2	-2	-2	-2	-2	1	1	1	1	-1	-1	-1	-1	1	
$\chi_{21}^{(49)}$	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	
$\chi_{21}^{(50)}$	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	1	1	1	1	1	1	1	1	1	
$\chi_{21}^{(51)}$	-2	-2	-2	-2	-2	2	2	2	2	2	2	2	2	2	2	-2	-2	-2	-2	-2	1	1	1	1	-1	-1	-1	-1	1	
$\chi_{21}^{(52)}$	2	2	2	2	2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	2	2	2	2	2	1	1	1	1	-1	-1	-1	-1	1	
$\chi_{21}^{(53)}$	.	.	.	.	.	-2	-2	-2	-2	-2	.	.	.	.	.	.	.	.	.	.	-2	-2	-2	-2	.	.	.	.	2
$\chi_{21}^{(54)}$	.	.	.	.	.	2	2	2	2	2	.	.	.	.	.	.	.	.	.	.	-2	-2	-2	-2	.	.	.	.	2
$\chi_{21}^{(55)}$	.	.	.	.	.	8	-8	-4	4	.	.	.	.	.	.	.	.	.	.	.	6	-6	-2	2	.	.	.	.	-6
$\chi_{21}^{(56)}$	.	.	.	.	.	-8	8	4	-4	.	.	.	.	.	.	.	.	.	.	.	6	-6	-2	2	.	.	.	.	-6
$\chi_{21}^{(57)}$	-1	-1	7	7	-1	-5	-5	-1	-1	3	5	5	1	1	-3	1	1	-7	-7	1	3	3	-1	-1	1	1	-3	-3	3	
$\chi_{21}^{(58)}$	1	1	5	5	-3	-7	-7	1	1	1	7	7	-1	-1	-1	-1	-1	-5	-5	3	3	3	-1	-1	1	1	-3	-3	3	
$\chi_{21}^{(59)}$	1	1	-7	-7	1	5	5	1	1	-3	-5	-5	-1	-1	3	-1	-1	7	7	-1	3	3	-1	-1	1	1	-3	-3	3	
$\chi_{21}^{(60)}$	-1	-1	-5	-5	3	7	7	-1	-1	-1	-7	-7	1	1	1	1	1	5	5	-3	3	3	-1	-1	1	1	-3	-3	3	

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$\chi_{21}^{(61)}$	1	1	-7	-7	1	-5	-5	-1	-1	3	5	5	1	1	-3	-1	-1	7	7	-1	3	3	-1	-1	-1	-1	3	3	3	
$\chi_{21}^{(62)}$	-1	-1	-5	-5	3	-7	-7	1	1	1	7	7	-1	-1	-1	1	1	5	5	-3	3	3	-1	-1	-1	-1	3	3	3	
$\chi_{21}^{(63)}$	-1	-1	7	7	-1	5	5	1	1	-3	-5	-5	-1	-1	3	1	1	-7	-7	1	3	3	-1	-1	-1	-1	3	3	3	
$\chi_{21}^{(64)}$	1	1	5	5	-3	7	7	-1	-1	-1	-7	-7	1	1	1	-1	-1	-5	-5	3	3	3	-1	-1	-1	-1	3	3	3	
$\chi_{21}^{(65)}$	-1	-1	7	7	-1	-5	-5	-1	-1	3	-5	-5	-1	-1	3	-1	-1	7	7	-1	3	3	-1	-1	1	1	-3	-3	3	
$\chi_{21}^{(66)}$	1	1	5	5	-3	-7	-7	1	1	1	-7	-7	1	1	1	1	1	5	5	-3	3	3	-1	-1	1	1	-3	-3	3	
$\chi_{21}^{(67)}$	1	1	-7	-7	1	5	5	1	1	-3	5	5	1	1	-3	1	1	-7	-7	1	3	3	-1	-1	1	1	-3	-3	3	
$\chi_{21}^{(68)}$	-1	-1	-5	-5	3	7	7	-1	-1	-1	7	7	-1	-1	-1	-1	-1	-5	-5	3	3	3	-1	-1	1	1	-3	-3	3	
$\chi_{21}^{(69)}$	1	1	-7	-7	1	-5	-5	-1	-1	3	-5	-5	-1	-1	3	1	1	-7	-7	1	3	3	-1	-1	-1	-1	3	3	3	
$\chi_{21}^{(70)}$	-1	-1	-5	-5	3	-7	-7	1	1	1	-7	-7	1	1	1	-1	-1	-5	-5	3	3	3	-1	-1	-1	-1	3	3	3	
$\chi_{21}^{(71)}$	-1	-1	7	7	-1	5	5	1	1	-3	5	5	1	1	-3	-1	-1	7	7	-1	3	3	-1	-1	-1	-1	3	3	3	
$\chi_{21}^{(72)}$	1	1	5	5	-3	7	7	-1	-1	-1	7	7	-1	-1	-1	1	1	5	5	-3	3	3	-1	-1	-1	-1	3	3	3	
$\chi_{21}^{(73)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-2	-2	-2	-2	-2	-2	-2	-2	-2
$\chi_{21}^{(74)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-2	-2	-2	-2	2	2	2	2	-2
$\chi_{21}^{(75)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-2	-2	-2	-2	-2	-2	-2	-2	-2
$\chi_{21}^{(76)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-2	-2	-2	-2	2	2	2	2	-2
$\chi_{21}^{(77)}$	.	.	.	.	.	6	6	6	6	6	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(78)}$	.	.	.	.	.	-6	-6	-6	-6	-6	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(79)}$	.	.	.	.	.	-8	8	-4	4	.	8	-8	4	-4	.	.	.	.	.	.	2	-2	2	-2	.	.	.	.	2
$\chi_{21}^{(80)}$	.	.	.	.	.	8	-8	4	-4	.	-8	8	-4	4	.	.	.	.	.	.	2	-2	2	-2	.	.	.	.	2
$\chi_{21}^{(81)}$	.	.	.	.	.	-8	8	-4	4	.	-8	8	-4	4	.	.	.	.	.	.	2	-2	2	-2	.	.	.	.	2
$\chi_{21}^{(82)}$	.	.	.	.	.	8	-8	4	-4	.	8	-8	4	-4	.	.	.	.	.	.	2	-2	2	-2	.	.	.	.	2
$\chi_{21}^{(83)}$	4	-4	8	-8	.	.	.	.	.	.	.	.	.	.	.	-4	4	-8	8	.	2	-2	2	-2	.	.	.	.	2
$\chi_{21}^{(84)}$	-4	4	-8	8	.	.	.	.	.	.	.	.	.	.	.	4	-4	8	-8	.	2	-2	2	-2	.	.	.	.	2
$\chi_{21}^{(85)}$	4	-4	8	-8	.	.	.	.	.	.	.	.	.	.	.	4	-4	8	-8	.	2	-2	2	-2	.	.	.	.	2
$\chi_{21}^{(86)}$	-4	4	-8	8	.	.	.	.	.	.	.	.	.	.	.	-4	4	-8	8	.	2	-2	2	-2	.	.	.	.	2
$\chi_{21}^{(87)}$	.	.	.	.	.	-4	-4	-4	-4	-4	.	.	.	.	.	.	.	.	.	.	2	2	2	2	.	.	.	.	-2
$\chi_{21}^{(88)}$	.	.	.	.	.	4	4	4	4	4	.	.	.	.	.	.	.	.	.	.	2	2	2	2	.	.	.	.	-2
$\chi_{21}^{(89)}$	.	.	.	.	.	8	-8	4	-4	.	.	.	.	.	.	.	.	.	.	.	2	-2	2	-2	.	.	.	.	-2
$\chi_{21}^{(90)}$	.	.	.	.	.	8	-8	4	-4	.	.	.	.	.	.	.	.	.	.	.	2	-2	2	-2	.	.	.	.	-2
$\chi_{21}^{(91)}$	.	.	.	.	.	-8	8	-4	4	.	.	.	.	.	.	.	.	.	.	.	2	-2	2	-2	.	.	.	.	-2
$\chi_{21}^{(92)}$	.	.	.	.	.	-8	8	-4	4	.	.	.	.	.	.	.	.	.	.	.	2	-2	2	-2	.	.	.	.	-2
$\chi_{21}^{(93)}$	4	-4	-8	8	.	8	-8	-4	4	.	-8	8	4	-4	.	-4	4	8	-8	.	3	-3	-1	1	1	-1	-3	3	3	
$\chi_{21}^{(94)}$	-4	4	8	-8	.	-8	8	4	-4	.	8	-8	-4	4	.	4	-4	-8	8	.	3	-3	-1	1	1	-1	-3	3	3	
$\chi_{21}^{(95)}$	-4	4	8	-8	.	8	-8	-4	4	.	-8	8	4	-4	.	4	-4	-8	8	.	3	-3	-1	1	-1	1	3	-3	3	
$\chi_{21}^{(96)}$	4	-4	-8	8	.	-8	8	4	-4	.	8	-8	-4	4	.	-4	4	8	-8	.	3	-3	-1	1	-1	1	3	-3	3	
$\chi_{21}^{(97)}$	4	-4	-8	8	.	8	-8	-4	4	.	8	-8	-4	4	.	4	-4	-8	8	.	3	-3	-1	1	1	-1	-3	3	3	
$\chi_{21}^{(98)}$	-4	4	8	-8	.	-8	8	4	-4	.	-8	8	4	-4	.	-4	4	8	-8	.	3	-3	-1	1	1	-1	-3	3	3	
$\chi_{21}^{(99)}$	-4	4	8	-8	.	8	-8	-4	4	.	8	-8	-4	4	.	-4	4	8	-8	.	3	-3	-1	1	-1	1	3	-3	3	
$\chi_{21}^{(100)}$	4	-4	-8	8	.	-8	8	4	-4	.	-8	8	4	-4	.	4	-4	-8	8	.	3	-3	-1	1	-1	1	3	-3	3	
$\chi_{21}^{(101)}$	2	-2	-4	4	.	4	-4	-2	2	.	-4	4	2	-2	.	-2	2	4	-4	.	-3	3	1	-1	-1	1	3	-3	-3	
$\chi_{21}^{(102)}$	-2	2	4	-4	.	-4	4	2	-2	.	4	-4	-2	2	.	2	-2	-4	4	.	-3	3	1	-1	-1	1	3	-3	-3	
$\chi_{21}^{(103)}$	-2	2	4	-4	.	4	-4	-2	2	.	-4	4	2	-2	.	2	-2	-4	4	.	-3	3	1	-1	-1	-1	-3	3	-3	
$\chi_{21}^{(104)}$	2	-2	-4	4	.	-4	4	2	-2	.	4	-4	-2	2	.	-2	2	4	-4	.	-3	3	1	-1	-1	-1	-3	3	-3	
$\chi_{21}^{(105)}$	2	-2	-4	4	.	4	-4	-2	2	.	4	-4	-2	2	.	2	-2	-4	4	.	-3	3	1	-1	-1	-1	3	-3	-3	

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$\chi_{21}^{(106)}$	-2	2	4	-4	.	-4	4	2	-2	.	-4	4	2	-2	.	-2	2	4	-4	.	-3	3	1	-1	-1	1	3	-3	-3	
$\chi_{21}^{(107)}$	-2	2	4	-4	.	4	-4	-2	2	.	4	-4	-2	2	.	-2	2	4	-4	.	-3	3	1	-1	1	-1	-3	3	-3	
$\chi_{21}^{(108)}$	2	-2	-4	4	.	-4	4	2	-2	.	-4	4	2	-2	.	2	-2	-4	4	.	-3	3	1	-1	1	-1	-3	3	-3	
$\chi_{21}^{(109)}$	.	.	.	.	.	10	10	2	2	-6	.	.	.	.	.	.	.	.	.	.	6	6	-2	-2	.	.	.	.	-6
$\chi_{21}^{(110)}$	.	.	.	.	.	14	14	-2	-2	-2	.	.	.	.	.	.	.	.	.	.	6	6	-2	-2	.	.	.	.	-6
$\chi_{21}^{(111)}$	.	.	.	.	.	-10	-10	-2	-2	6	.	.	.	.	.	.	.	.	.	.	6	6	-2	-2	.	.	.	.	-6
$\chi_{21}^{(112)}$	.	.	.	.	.	-14	-14	2	2	2	.	.	.	.	.	.	.	.	.	.	6	6	-2	-2	.	.	.	.	-6
$\chi_{21}^{(113)}$	2	2	-2	-2	-2	-2	-2	2	2	-2	2	2	-2	-2	2	-2	-2	2	2	2	-3	-3	1	1	-1	-1	3	3	-3	
$\chi_{21}^{(114)}$	-2	-2	2	2	2	2	2	-2	-2	2	-2	-2	2	2	-2	2	2	-2	-2	-2	-3	-3	1	1	-1	-1	3	3	-3	
$\chi_{21}^{(115)}$	-2	-2	2	2	2	-2	-2	2	2	-2	2	2	-2	-2	2	2	2	-2	-2	-2	-3	-3	1	1	1	1	-3	-3	-3	
$\chi_{21}^{(116)}$	2	2	-2	-2	-2	2	2	-2	-2	2	-2	-2	2	2	-2	-2	-2	2	2	2	-3	-3	1	1	1	1	-3	-3	-3	
$\chi_{21}^{(117)}$	2	2	-2	-2	-2	-2	-2	2	2	-2	-2	-2	2	2	-2	2	2	-2	-2	-2	-3	-3	1	1	-1	-1	3	3	-3	
$\chi_{21}^{(118)}$	-2	-2	2	2	2	2	2	-2	-2	2	2	2	-2	-2	2	-2	-2	2	2	2	-3	-3	1	1	-1	-1	3	3	-3	
$\chi_{21}^{(119)}$	-2	-2	2	2	2	-2	-2	2	2	-2	-2	-2	2	2	-2	-2	-2	2	2	2	-3	-3	1	1	1	1	-3	-3	-3	
$\chi_{21}^{(120)}$	2	2	-2	-2	-2	2	2	-2	-2	2	2	2	-2	-2	2	2	2	-2	-2	-2	-3	-3	1	1	1	1	-3	-3	-3	
$\chi_{21}^{(121)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-4	-4	-4	-4	.	.	.	.	4
$\chi_{21}^{(122)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(123)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(124)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(125)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(126)}$	-4	4	-8	8	.	-8	8	-4	4	.	8	-8	4	-4	.	4	-4	8	-8	.	1	-1	1	-1	3	-3	3	-3	1	
$\chi_{21}^{(127)}$	4	-4	8	-8	.	-8	8	-4	4	.	8	-8	4	-4	.	-4	4	-8	8	.	1	-1	1	-1	-3	3	-3	3	1	
$\chi_{21}^{(128)}$	-4	4	-8	8	.	8	-8	4	-4	.	-8	8	-4	4	.	4	-4	8	-8	.	1	-1	1	-1	-3	3	-3	3	1	
$\chi_{21}^{(129)}$	4	-4	8	-8	.	8	-8	4	-4	.	-8	8	-4	4	.	-4	4	-8	8	.	1	-1	1	-1	3	-3	3	-3	1	
$\chi_{21}^{(130)}$	-4	4	-8	8	.	-8	8	-4	4	.	-8	8	-4	4	.	-4	4	-8	8	.	1	-1	1	-1	3	-3	3	-3	1	
$\chi_{21}^{(131)}$	4	-4	8	-8	.	-8	8	-4	4	.	-8	8	-4	4	.	4	-4	8	-8	.	1	-1	1	-1	-3	3	-3	3	1	
$\chi_{21}^{(132)}$	-4	4	-8	8	.	8	-8	4	-4	.	8	-8	4	-4	.	-4	4	-8	8	.	1	-1	1	-1	-3	3	-3	3	1	
$\chi_{21}^{(133)}$	4	-4	8	-8	.	8	-8	4	-4	.	8	-8	4	-4	.	4	-4	8	-8	.	1	-1	1	-1	3	-3	3	-3	1	
$\chi_{21}^{(134)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	4	-4	4	-4	.	.	.	.	-4
$\chi_{21}^{(135)}$	-3	-3	-3	-3	5	9	9	-3	-3	1	-9	-9	3	3	-1	3	3	3	3	-5	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(136)}$	3	3	3	3	-5	-9	-9	3	3	-1	9	9	-3	-3	1	-3	-3	-3	-3	5	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(137)}$	3	3	3	3	-5	9	9	-3	-3	1	-9	-9	3	3	-1	-3	-3	-3	-3	5	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(138)}$	-3	-3	-3	-3	5	-9	-9	3	3	-1	9	9	-3	-3	1	3	3	3	3	-5	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(139)}$	-3	-3	-3	-3	5	9	9	-3	-3	1	9	9	-3	-3	1	-3	-3	-3	-3	5	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(140)}$	3	3	3	3	-5	-9	-9	3	3	-1	-9	-9	3	3	-1	3	3	3	3	-5	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(141)}$	3	3	3	3	-5	9	9	-3	-3	1	9	9	-3	-3	1	3	3	3	3	-5	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(142)}$	-3	-3	-3	-3	5	-9	-9	3	3	-1	-9	-9	3	3	-1	-3	-3	-3	-3	5	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(143)}$	-3	-3	9	9	1	-3	-3	-3	-3	5	3	3	3	3	-5	3	3	-9	-9	-1	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(144)}$	3	3	-9	-9	-1	3	3	3	3	-5	-3	-3	-3	-3	5	-3	-3	9	9	1	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(145)}$	3	3	-9	-9	-1	-3	-3	-3	-3	5	3	3	3	3	-5	-3	-3	9	9	1	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(146)}$	-3	-3	9	9	1	3	3	3	3	-5	-3	-3	-3	-3	5	3	3	-9	-9	-1	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(147)}$	-3	-3	9	9	1	-3	-3	-3	-3	5	-3	-3	-3	-3	5	-3	-3	9	9	1	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(148)}$	3	3	-9	-9	-1	3	3	3	3	-5	3	3	3	3	-5	3	3	-9	-9	-1	
$\chi_{21}^{(149)}$	3	3	-9	-9	-1	-3	-3	-3	-3	5	-3	-3	-3	-3	5	3	3	-9	-9	-1	
$\chi_{21}^{(150)}$	-3	-3	9	9	1	3	3	3	3	-5	3	3	3	3	-5	-3	-3	9	9	1	

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$\chi_{21}^{(151)}$	-16	16	8	-8	6	-6	-2	2	-6
$\chi_{21}^{(152)}$	16	-16	-8	8	6	-6	-2	2	-6	
$\chi_{21}^{(153)}$	-8	8	4	-4	-6	6	2	-2	6	
$\chi_{21}^{(154)}$	8	-8	-4	4	-6	6	2	-2	6	
$\chi_{21}^{(155)}$	4	4	-4	-4	4	-6	-6	2	2	6	
$\chi_{21}^{(156)}$	-4	-4	4	4	-4	-6	-6	2	2	6	
$\chi_{21}^{(157)}$	
$\chi_{21}^{(158)}$	16	-16	8	-8	2	-2	2	-2	-2	
$\chi_{21}^{(159)}$	-16	16	-8	8	2	-2	2	-2	-2	
$\chi_{21}^{(160)}$	-4	4	-4	4	.	.	.	.	.	-4		
$\chi_{21}^{(161)}$	-4	4	-4	4	.	.	.	.	.	-4		
$\chi_{21}^{(162)}$	-4	4	-4	4	.	.	.	.	.	4		
$\chi_{21}^{(163)}$	-4	4	-4	4	4		
$\chi_{21}^{(164)}$	-18	-18	6	6	-2		
$\chi_{21}^{(165)}$	18	18	-6	-6	2		
$\chi_{21}^{(166)}$	6	6	6	6	-10		
$\chi_{21}^{(167)}$	-6	-6	-6	-6	10		

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$\chi_{21}^{(34)}$	-3	-1	1	3	-3	-1	1	-1	1	3	-3	2	-2	.	-2	2	.	2	-2	.	2	-2	.	-2	2	2
$\chi_{21}^{(35)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-1
$\chi_{21}^{(36)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-1
$\chi_{21}^{(37)}$	.	.	.	.	.	.	.	.	.	.	.	1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	1	-1
$\chi_{21}^{(38)}$	.	.	.	.	.	.	.	.	.	.	.	1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	1	-1
$\chi_{21}^{(39)}$	.	.	.	.	.	.	.	.	.	.	.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{21}^{(40)}$	.	.	.	.	.	.	.	.	.	.	.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{21}^{(41)}$	.	.	.	.	.	.	.	.	.	.	.	1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	1	1
$\chi_{21}^{(42)}$	.	.	.	.	.	.	.	.	.	.	.	1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	1	1
$\chi_{21}^{(43)}$	-4	-4	-4	.	.	.	.	.	.	.	.	2	2	2	2	2	.	.	.	.	-2	-2	-2	-2	-2	.
$\chi_{21}^{(44)}$	-4	-4	-4	.	.	.	.	.	.	.	.	2	2	2	2	2	.	.	.	.	-2	-2	-2	-2	-2	.
$\chi_{21}^{(45)}$	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	2
$\chi_{21}^{(46)}$	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	2
$\chi_{21}^{(47)}$	1	1	1	-1	-1	-1	-1	1	1	1	1	-2	-2	-2	-2	-2	2	2	2	2	-2	-2	-2	-2	-2	2
$\chi_{21}^{(48)}$	1	1	1	-1	-1	-1	-1	1	1	1	1	-2	-2	-2	-2	-2	2	2	2	2	-2	-2	-2	-2	-2	2
$\chi_{21}^{(49)}$	1	1	1	1	1	1	1	1	1	1	1	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
$\chi_{21}^{(50)}$	1	1	1	1	1	1	1	1	1	1	1	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
$\chi_{21}^{(51)}$	1	1	1	1	1	1	1	-1	-1	-1	-1	-2	-2	-2	-2	-2	2	2	2	2	-2	-2	-2	-2	-2	-2
$\chi_{21}^{(52)}$	1	1	1	1	1	1	1	-1	-1	-1	-1	-2	-2	-2	-2	-2	2	2	2	2	-2	-2	-2	-2	-2	-2
$\chi_{21}^{(53)}$	2	2	2	.	.	.	.	.	.	.	.	2	2	2	2	2	.	.	.	.	-2	-2	-2	-2	-2	.
$\chi_{21}^{(54)}$	2	2	2	.	.	.	.	.	.	.	.	2	2	2	2	2	.	.	.	.	-2	-2	-2	-2	-2	.
$\chi_{21}^{(55)}$	6	2	-2	.	.	.	.	.	.	.	.	4	-4	.	-4	4	.	.	.	.	-4	4	.	4	-4	.
$\chi_{21}^{(56)}$	6	2	-2	.	.	.	.	.	.	.	.	4	-4	.	-4	4	.	.	.	.	-4	4	.	4	-4	.
$\chi_{21}^{(57)}$	3	-1	-1	-3	-3	1	1	-1	-1	3	3	-1	-1	-1	3	3	3	-1	-1	-1	-1	-1	-1	3	3	1
$\chi_{21}^{(58)}$	3	-1	-1	-3	-3	1	1	-1	-1	3	3	3	3	-1	-1	-1	-1	-1	-1	3	3	3	-1	-1	-1	-3
$\chi_{21}^{(59)}$	3	-1	-1	-3	-3	1	1	-1	-1	3	3	-1	-1	-1	3	3	3	-1	-1	-1	-1	-1	-1	3	3	1
$\chi_{21}^{(60)}$	3	-1	-1	-3	-3	1	1	-1	-1	3	3	3	3	-1	-1	-1	-1	-1	-1	3	3	3	-1	-1	-1	-3
$\chi_{21}^{(61)}$	3	-1	-1	-3	-3	1	1	1	1	-3	-3	-1	-1	-1	3	3	-3	1	1	1	-1	-1	-1	3	3	1
$\chi_{21}^{(62)}$	3	-1	-1	-3	-3	1	1	1	1	-3	-3	3	3	-1	-1	-1	1	1	1	-3	3	3	-1	-1	-1	-3
$\chi_{21}^{(63)}$	3	-1	-1	-3	-3	1	1	1	1	-3	-3	-1	-1	-1	3	3	-3	1	1	1	-1	-1	-1	3	3	1
$\chi_{21}^{(64)}$	3	-1	-1	-3	-3	1	1	1	1	-3	-3	3	3	-1	-1	-1	1	1	1	-3	3	3	-1	-1	-1	-3
$\chi_{21}^{(65)}$	3	-1	-1	3	3	-1	-1	1	1	-3	-3	-1	-1	-1	3	3	3	-1	-1	-1	-1	-1	-1	3	3	-1
$\chi_{21}^{(66)}$	3	-1	-1	3	3	-1	-1	1	1	-3	-3	3	3	-1	-1	-1	-1	-1	-1	3	3	3	-1	-1	-1	3
$\chi_{21}^{(67)}$	3	-1	-1	3	3	-1	-1	1	1	-3	-3	-1	-1	-1	3	3	3	-1	-1	-1	-1	-1	-1	3	3	-1
$\chi_{21}^{(68)}$	3	-1	-1	3	3	-1	-1	1	1	-3	-3	3	3	-1	-1	-1	-1	-1	-1	3	3	3	-1	-1	-1	3
$\chi_{21}^{(69)}$	3	-1	-1	3	3	-1	-1	-1	-1	3	3	-1	-1	-1	3	3	-3	1	1	1	-1	-1	-1	3	3	-1
$\chi_{21}^{(70)}$	3	-1	-1	3	3	-1	-1	-1	-1	3	3	3	3	-1	-1	-1	1	1	1	-3	3	3	-1	-1	-1	3
$\chi_{21}^{(71)}$	3	-1	-1	3	3	-1	-1	-1	-1	3	3	-1	-1	-1	3	3	-3	1	1	1	-1	-1	-1	3	3	-1
$\chi_{21}^{(72)}$	3	-1	-1	3	3	-1	-1	-1	-1	3	3	3	3	-1	-1	-1	1	1	1	-3	3	3	-1	-1	-1	3
$\chi_{21}^{(73)}$	-2	-2	-2	2	2	2	2	2	2	2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(74)}$	-2	-2	-2	2	2	2	2	-2	-2	-2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(75)}$	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(76)}$	-2	-2	-2	-2	-2	-2	-2	2	2	2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(77)}$	.	.	.	.	.	.	.	.	.	.	.	2	2	2	2	2	.	.	.	.	-2	-2	-2	-2	-2	.
$\chi_{21}^{(78)}$	.	.	.	.	.	.	.	.	.	.	.	2	2	2	2	2	.	.	.	.	-2	-2	-2	-2	-2	.
$\chi_{21}^{(79)}$	-2	2	-2	-2	2	-2	2	4	-4	.	4	-4	4	-4	.	4	-4	-4
$\chi_{21}^{(80)}$	-2	2	-2	-2	2	-2	2	4	-4	.	4	-4	4	-4	.	4	-4	-4
$\chi_{21}^{(81)}$	-2	2	-2	-2	2	-2	2	4	-4	.	4	-4	4	-4	.	4	-4	4

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$\chi_{21}^{(82)}$	-2	2	-2	2	-2	2	-2	4	-4	.	4	-4	4	-4	.	4	-4	4	4
$\chi_{21}^{(83)}$	-2	2	-2	-2	2	-2	2	-4	4	.	-4	4	-4	4	.	-4	4	4	4
$\chi_{21}^{(84)}$	-2	2	-2	-2	2	-2	2	-4	4	.	-4	4	-4	4	.	-4	4	4	4
$\chi_{21}^{(85)}$	-2	2	-2	2	-2	2	-2	.	.	.	.	-4	4	.	-4	4	.	.	.	.	-4	4	.	-4	4	4	-4
$\chi_{21}^{(86)}$	-2	2	-2	2	-2	2	-2	.	.	.	.	-4	4	.	-4	4	.	.	.	.	-4	4	.	-4	4	4	-4
$\chi_{21}^{(87)}$	-2	-2	-2	.	.	.	.	.	.	.	.	-4	-4	-4	-4	-4	.	.	.	.	4	4	4	4	4	4	.
$\chi_{21}^{(88)}$	-2	-2	-2	.	.	.	.	.	.	.	.	-4	-4	-4	-4	-4	.	.	.	.	4	4	4	4	4	4	.
$\chi_{21}^{(89)}$	2	-2	2	.	.	.	.	.	.	.	.	4	-4	.	4	-4	.	.	.	.	-4	4	.	-4	4	4	.
$\chi_{21}^{(90)}$	2	-2	2	.	.	.	.	.	.	.	.	4	-4	.	4	-4	.	.	.	.	-4	4	.	-4	4	4	.
$\chi_{21}^{(91)}$	2	-2	2	.	.	.	.	.	.	.	.	4	-4	.	4	-4	.	.	.	.	-4	4	.	-4	4	4	.
$\chi_{21}^{(92)}$	2	-2	2	.	.	.	.	.	.	.	.	4	-4	.	4	-4	.	.	.	.	-4	4	.	-4	4	4	.
$\chi_{21}^{(93)}$	-3	-1	1	-3	3	1	-1	-1	1	3	-3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(94)}$	-3	-1	1	-3	3	1	-1	-1	1	3	-3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(95)}$	-3	-1	1	-3	3	1	-1	1	-1	-3	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(96)}$	-3	-1	1	-3	3	1	-1	1	-1	-3	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(97)}$	-3	-1	1	3	-3	-1	1	1	-1	-3	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(98)}$	-3	-1	1	3	-3	-1	1	1	-1	-3	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(99)}$	-3	-1	1	3	-3	-1	1	-1	1	3	-3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(100)}$	-3	-1	1	3	-3	-1	1	-1	1	3	-3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(101)}$	3	1	-1	3	-3	-1	1	1	-1	-3	3	2	-2	.	-2	2	.	-2	2	.	2	-2	.	-2	2	2	-2
$\chi_{21}^{(102)}$	3	1	-1	3	-3	-1	1	1	-1	-3	3	2	-2	.	-2	2	.	-2	2	.	2	-2	.	-2	2	2	-2
$\chi_{21}^{(103)}$	3	1	-1	3	-3	-1	1	-1	1	3	-3	2	-2	.	-2	2	.	2	-2	.	2	-2	.	-2	2	2	-2
$\chi_{21}^{(104)}$	3	1	-1	3	-3	-1	1	-1	1	3	-3	2	-2	.	-2	2	.	2	-2	.	2	-2	.	-2	2	2	-2
$\chi_{21}^{(105)}$	3	1	-1	-3	3	1	-1	-1	1	3	-3	2	-2	.	-2	2	.	-2	2	.	2	-2	.	-2	2	2	2
$\chi_{21}^{(106)}$	3	1	-1	-3	3	1	-1	-1	1	3	-3	2	-2	.	-2	2	.	-2	2	.	2	-2	.	-2	2	2	2
$\chi_{21}^{(107)}$	3	1	-1	-3	3	1	-1	1	-1	-3	3	2	-2	.	-2	2	.	2	-2	.	2	-2	.	-2	2	2	2
$\chi_{21}^{(108)}$	3	1	-1	-3	3	1	-1	1	-1	-3	3	2	-2	.	-2	2	.	2	-2	.	2	-2	.	-2	2	2	2
$\chi_{21}^{(109)}$	-6	2	2	.	.	.	.	.	.	.	.	-2	-2	-2	6	6	.	.	.	.	2	2	2	-6	-6	.	.
$\chi_{21}^{(110)}$	-6	2	2	.	.	.	.	.	.	.	.	6	6	-2	-2	-2	.	.	.	.	-6	-6	2	2	2	.	.
$\chi_{21}^{(111)}$	-6	2	2	.	.	.	.	.	.	.	.	-2	-2	-2	6	6	.	.	.	.	2	2	2	-6	-6	.	.
$\chi_{21}^{(112)}$	-6	2	2	.	.	.	.	.	.	.	.	6	6	-2	-2	-2	.	.	.	.	-6	-6	2	2	2	.	.
$\chi_{21}^{(113)}$	-3	1	1	3	3	-1	-1	1	1	-3	-3	2	2	-2	2	2	2	-2	-2	2	2	2	-2	2	2	2	-2
$\chi_{21}^{(114)}$	-3	1	1	3	3	-1	-1	1	1	-3	-3	2	2	-2	2	2	2	-2	-2	2	2	2	-2	2	2	2	-2
$\chi_{21}^{(115)}$	-3	1	1	3	3	-1	-1	-1	-1	3	3	2	2	-2	2	2	-2	2	2	-2	2	2	-2	2	2	2	-2
$\chi_{21}^{(116)}$	-3	1	1	3	3	-1	-1	-1	-1	3	3	2	2	-2	2	2	-2	2	2	-2	2	2	-2	2	2	2	-2
$\chi_{21}^{(117)}$	-3	1	1	-3	-3	1	1	-1	-1	3	3	2	2	-2	2	2	2	-2	-2	2	2	2	-2	2	2	2	2
$\chi_{21}^{(118)}$	-3	1	1	-3	-3	1	1	-1	-1	3	3	2	2	-2	2	2	2	-2	-2	2	2	2	-2	2	2	2	2
$\chi_{21}^{(119)}$	-3	1	1	-3	-3	1	1	1	1	-3	-3	2	2	-2	2	2	-2	2	2	-2	2	2	-2	2	2	2	2
$\chi_{21}^{(120)}$	-3	1	1	-3	-3	1	1	1	1	-3	-3	2	2	-2	2	2	-2	2	2	-2	2	2	-2	2	2	2	2
$\chi_{21}^{(121)}$	4	4	4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(122)}$	.	.	.	.	.	.	.	.	.	.	.	-4	4	.	4	-4	.	4	-4	.	-4	4	.	4	-4	4	4
$\chi_{21}^{(123)}$	.	.	.	.	.	.	.	.	.	.	.	-4	4	.	4	-4	.	-4	4	.	-4	4	.	4	-4	4	4
$\chi_{21}^{(124)}$	.	.	.	.	.	.	.	.	.	.	.	-4	4	.	4	-4	.	4	-4	.	-4	4	.	4	-4	-4	-4
$\chi_{21}^{(125)}$	.	.	.	.	.	.	.	.	.	.	.	-4	4	.	4	-4	.	-4	4	.	-4	4	.	4	-4	-4	-4
$\chi_{21}^{(126)}$	-1	1	-1	-1	1	-1	1	-3	3	-3	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

	60											70													
$\chi_{21}^{(127)}$	-1	1	-1	-1	1	-1	1	3	-3	3	-3	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(128)}$	-1	1	-1	-1	1	-1	1	3	-3	3	-3	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(129)}$	-1	1	-1	-1	1	-1	1	-3	3	-3	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(130)}$	-1	1	-1	1	-1	1	-1	3	-3	3	-3	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(131)}$	-1	1	-1	1	-1	1	-1	-3	3	-3	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(132)}$	-1	1	-1	1	-1	1	-1	-3	3	-3	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(133)}$	-1	1	-1	1	-1	1	-1	3	-3	3	-3	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(134)}$	4	-4	4	.	.	.	.	.	.	.	.	-8	8	.	-8	8	.	.	.	.	8	-8	.	8	-8
$\chi_{21}^{(135)}$	.	.	.	.	.	.	.	.	.	.	.	1	1	1	-3	-3	-3	1	1	1	1	1	1	-3	-3
$\chi_{21}^{(136)}$	.	.	.	.	.	.	.	.	.	.	.	1	1	1	-3	-3	-3	1	1	1	1	1	1	-3	-3
$\chi_{21}^{(137)}$	.	.	.	.	.	.	.	.	.	.	.	1	1	1	-3	-3	3	-1	-1	-1	1	1	1	-3	-3
$\chi_{21}^{(138)}$	.	.	.	.	.	.	.	.	.	.	.	1	1	1	-3	-3	3	-1	-1	-1	1	1	1	-3	-3
$\chi_{21}^{(139)}$	.	.	.	.	.	.	.	.	.	.	.	1	1	1	-3	-3	-3	1	1	1	1	1	1	-3	-3
$\chi_{21}^{(140)}$	.	.	.	.	.	.	.	.	.	.	.	1	1	1	-3	-3	-3	1	1	1	1	1	1	-3	-3
$\chi_{21}^{(141)}$	.	.	.	.	.	.	.	.	.	.	.	1	1	1	-3	-3	3	-1	-1	-1	1	1	1	-3	-3
$\chi_{21}^{(142)}$	.	.	.	.	.	.	.	.	.	.	.	1	1	1	-3	-3	3	-1	-1	-1	1	1	1	-3	-3
$\chi_{21}^{(143)}$	.	.	.	.	.	.	.	.	.	.	.	-3	-3	1	1	1	1	1	1	-3	-3	-3	1	1	1
$\chi_{21}^{(144)}$	.	.	.	.	.	.	.	.	.	.	.	-3	-3	1	1	1	1	1	1	-3	-3	-3	1	1	1
$\chi_{21}^{(145)}$	.	.	.	.	.	.	.	.	.	.	.	-3	-3	1	1	1	-1	-1	-1	3	-3	-3	1	1	1
$\chi_{21}^{(146)}$	.	.	.	.	.	.	.	.	.	.	.	-3	-3	1	1	1	-1	-1	-1	3	-3	-3	1	1	1
$\chi_{21}^{(147)}$	.	.	.	.	.	.	.	.	.	.	.	-3	-3	1	1	1	1	1	1	-3	-3	-3	1	1	1
$\chi_{21}^{(148)}$	.	.	.	.	.	.	.	.	.	.	.	-3	-3	1	1	1	1	1	1	-3	-3	-3	1	1	1
$\chi_{21}^{(149)}$	.	.	.	.	.	.	.	.	.	.	.	-3	-3	1	1	1	-1	-1	-1	3	-3	-3	1	1	1
$\chi_{21}^{(150)}$	.	.	.	.	.	.	.	.	.	.	.	-3	-3	1	1	1	-1	-1	-1	3	-3	-3	1	1	1
$\chi_{21}^{(151)}$	6	2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(152)}$	6	2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(153)}$	-6	-2	2	.	.	.	.	.	.	.	.	4	-4	.	-4	4	.	.	.	.	-4	4	.	4	-4
$\chi_{21}^{(154)}$	-6	-2	2	.	.	.	.	.	.	.	.	4	-4	.	-4	4	.	.	.	.	-4	4	.	4	-4
$\chi_{21}^{(155)}$	6	-2	-2	.	.	.	.	.	.	.	.	4	4	-4	4	4	.	.	.	.	-4	-4	4	-4	-4
$\chi_{21}^{(156)}$	6	-2	-2	.	.	.	.	.	.	.	.	4	4	-4	4	4	.	.	.	.	-4	-4	4	-4	-4
$\chi_{21}^{(157)}$	.	.	.	.	.	.	.	.	.	.	.	-8	8	.	8	-8	.	.	.	.	8	-8	.	-8	8
$\chi_{21}^{(158)}$	2	-2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(159)}$	2	-2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(160)}$	4	-4	4	4	-4	4	-4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(161)}$	4	-4	4	-4	4	-4	4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(162)}$	-4	4	-4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(163)}$	-4	4	-4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(164)}$	.	.	.	.	.	.	.	.	.	.	.	2	2	2	-6	-6	.	.	.	.	-2	-2	-2	6	6
$\chi_{21}^{(165)}$	.	.	.	.	.	.	.	.	.	.	.	2	2	2	-6	-6	.	.	.	.	-2	-2	-2	6	6
$\chi_{21}^{(166)}$	.	.	.	.	.	.	.	.	.	.	.	-6	-6	2	2	2	.	.	.	.	6	6	-2	-2	-2
$\chi_{21}^{(167)}$	.	.	.	.	.	.	.	.	.	.	.	-6	-6	2	2	2	.	.	.	.	6	6	-2	-2	-2

[illegible]

[illegible]

	80								90								100							
$\chi_{21}^{(91)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2
$\chi_{21}^{(92)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2
$\chi_{21}^{(93)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1
$\chi_{21}^{(94)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
$\chi_{21}^{(95)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1
$\chi_{21}^{(96)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
$\chi_{21}^{(97)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1
$\chi_{21}^{(98)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
$\chi_{21}^{(99)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1
$\chi_{21}^{(100)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
$\chi_{21}^{(101)}$	2	.	2	-2	.	2	-2	.	-2	2	.	.	2	-2	-2	2	.	2	-2	.	.	-2	2	1
$\chi_{21}^{(102)}$	2	.	2	-2	.	2	-2	.	2	-2	.	.	-2	2	2	-2	.	-2	2	.	.	2	-2	-1
$\chi_{21}^{(103)}$	2	.	2	-2	.	-2	2	.	-2	2	.	.	-2	2	-2	2	.	2	-2	.	.	2	-2	1
$\chi_{21}^{(104)}$	2	.	2	-2	.	-2	2	.	2	-2	.	.	2	-2	2	-2	.	-2	2	.	.	-2	2	-1
$\chi_{21}^{(105)}$	-2	.	-2	2	.	-2	2	.	-2	2	.	.	2	-2	-2	2	.	-2	2	.	.	2	-2	1
$\chi_{21}^{(106)}$	-2	.	-2	2	.	-2	2	.	2	-2	.	.	-2	2	2	-2	.	2	-2	.	.	-2	2	-1
$\chi_{21}^{(107)}$	-2	.	-2	2	.	2	-2	.	-2	2	.	.	-2	2	-2	2	.	-2	2	.	.	-2	2	1
$\chi_{21}^{(108)}$	-2	.	-2	2	.	2	-2	.	2	-2	.	.	2	-2	2	-2	.	2	-2	.	.	2	-2	-1
$\chi_{21}^{(109)}$	.	.	.	.	.	.	.	.	-2	-2	2	.	.	.	2	2	-2	.	.	.	.	.	.	2
$\chi_{21}^{(110)}$	.	.	.	.	.	.	.	.	-2	-2	2	.	.	.	2	2	-2	.	.	.	.	.	.	-2
$\chi_{21}^{(111)}$	.	.	.	.	.	.	.	.	2	2	-2	.	.	.	-2	-2	2	.	.	.	.	.	.	-2
$\chi_{21}^{(112)}$	.	.	.	.	.	.	.	.	2	2	-2	.	.	.	-2	-2	2	.	.	.	.	.	.	2
$\chi_{21}^{(113)}$	-2	2	-2	-2	-2	2	2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
$\chi_{21}^{(114)}$	-2	2	-2	-2	-2	2	2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1
$\chi_{21}^{(115)}$	-2	2	-2	-2	2	-2	-2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
$\chi_{21}^{(116)}$	-2	2	-2	-2	2	-2	-2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1
$\chi_{21}^{(117)}$	2	-2	2	2	2	-2	-2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
$\chi_{21}^{(118)}$	2	-2	2	2	2	-2	-2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1
$\chi_{21}^{(119)}$	2	-2	2	2	-2	2	2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
$\chi_{21}^{(120)}$	2	-2	2	2	-2	2	2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1
$\chi_{21}^{(121)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(122)}$	-4	.	-4	4	.	-4	4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(123)}$	-4	.	-4	4	.	4	-4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(124)}$	4	.	4	-4	.	4	-4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(125)}$	4	.	4	-4	.	-4	4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(126)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
$\chi_{21}^{(127)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
$\chi_{21}^{(128)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1
$\chi_{21}^{(129)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1
$\chi_{21}^{(130)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
$\chi_{21}^{(131)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1
$\chi_{21}^{(132)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1
$\chi_{21}^{(133)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1
$\chi_{21}^{(134)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(135)}$	-1	-1	3	3	3	-1	-1	-1	-1	-1	1	-1	1	1	-1	-1	1	1	1	-1	1	-1	-1	.

	80								90								100							
$\chi_{21}^{(136)}$	-1	-1	3	3	3	-1	-1	-1	1	1	-1	1	-1	-1	1	1	-1	-1	-1	1	-1	1	1	.
$\chi_{21}^{(137)}$	-1	-1	3	3	-3	1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	1	-1	-1	1	1	.
$\chi_{21}^{(138)}$	-1	-1	3	3	-3	1	1	1	1	1	-1	-1	1	1	1	1	-1	-1	-1	1	1	-1	-1	.
$\chi_{21}^{(139)}$	1	1	-3	-3	-3	1	1	1	-1	-1	1	-1	1	1	-1	-1	1	-1	-1	1	-1	1	1	.
$\chi_{21}^{(140)}$	1	1	-3	-3	-3	1	1	1	1	1	-1	1	-1	-1	1	1	-1	1	1	-1	1	-1	-1	.
$\chi_{21}^{(141)}$	1	1	-3	-3	3	-1	-1	-1	-1	-1	1	1	-1	-1	-1	-1	1	-1	-1	1	1	-1	-1	.
$\chi_{21}^{(142)}$	1	1	-3	-3	3	-1	-1	-1	1	1	-1	-1	1	1	1	1	-1	1	1	-1	-1	1	1	.
$\chi_{21}^{(143)}$	3	-1	-1	-1	-1	-1	-1	3	1	1	-1	1	-1	-1	1	1	-1	-1	-1	1	-1	1	1	.
$\chi_{21}^{(144)}$	3	-1	-1	-1	-1	-1	-1	3	-1	-1	1	-1	1	1	-1	-1	1	1	1	-1	1	-1	-1	.
$\chi_{21}^{(145)}$	3	-1	-1	-1	1	1	1	-3	1	1	-1	-1	1	1	1	1	-1	-1	-1	1	1	-1	-1	.
$\chi_{21}^{(146)}$	3	-1	-1	-1	1	1	1	-3	-1	-1	1	1	-1	-1	-1	-1	1	1	1	-1	-1	1	1	.
$\chi_{21}^{(147)}$	-3	1	1	1	1	1	1	-3	1	1	-1	1	-1	-1	1	1	-1	1	1	-1	1	-1	-1	.
$\chi_{21}^{(148)}$	-3	1	1	1	1	1	1	-3	-1	-1	1	-1	1	1	-1	-1	1	-1	-1	1	-1	1	1	.
$\chi_{21}^{(149)}$	-3	1	1	1	-1	-1	-1	3	1	1	-1	-1	1	1	1	1	-1	1	1	-1	-1	1	1	.
$\chi_{21}^{(150)}$	-3	1	1	1	-1	-1	-1	3	-1	-1	1	1	-1	-1	-1	-1	1	-1	-1	1	1	-1	-1	.
$\chi_{21}^{(151)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-2
$\chi_{21}^{(152)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2
$\chi_{21}^{(153)}$	.	.	.	.	.	.	.	.	-4	4	.	.	.	.	4	-4	.	.	.	.	.	.	.	2
$\chi_{21}^{(154)}$	.	.	.	.	.	.	.	.	4	-4	.	.	.	.	-4	4	.	.	.	.	.	.	.	-2
$\chi_{21}^{(155)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2
$\chi_{21}^{(156)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-2
$\chi_{21}^{(157)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(158)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2
$\chi_{21}^{(159)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-2
$\chi_{21}^{(160)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(161)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(162)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(163)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(164)}$	.	.	.	.	.	.	.	.	-2	-2	2	.	.	.	2	2	-2	.	.	.	.	.	.	.
$\chi_{21}^{(165)}$	.	.	.	.	.	.	.	.	2	2	-2	.	.	.	-2	-2	2	.	.	.	.	.	.	.
$\chi_{21}^{(166)}$	.	.	.	.	.	.	.	.	2	2	-2	.	.	.	-2	-2	2	.	.	.	.	.	.	.
$\chi_{21}^{(167)}$	.	.	.	.	.	.	.	.	-2	-2	2	.	.	.	2	2	-2	.	.	.	.	.	.	.
$\chi_{21}^{(1)}$	110								120															
$\chi_{21}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{21}^{(2)}$	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	-1	-1	1
$\chi_{21}^{(3)}$	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	1	1	-1	-1	1
$\chi_{21}^{(4)}$	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	-1	-1	1
$\chi_{21}^{(5)}$	1	1	1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	1	1	-1	-1	1
$\chi_{21}^{(6)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{21}^{(7)}$	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1
$\chi_{21}^{(8)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1
$\chi_{21}^{(9)}$	-2	-2	-2	.	.	.	.	2	2	2	2	.	.	.	.	.	.	.	.	2	2	.	.	-2
$\chi_{21}^{(10)}$	2	2	2	.	.	.	.	-2	-2	-2	-2	.	.	.	.	.	.	.	.	2	2	.	.	-2

	110																120								
$\chi_{21}^{(11)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	-1	-1	-1	-1	-1
$\chi_{21}^{(12)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	-1	-1	-1	-1	-1
$\chi_{21}^{(13)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	-1	1	1	-1	-1
$\chi_{21}^{(14)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	-1	1	1	-1	-1
$\chi_{21}^{(15)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	-1	-1	-1	-1	-1
$\chi_{21}^{(16)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	-1	-1	-1	-1	-1
$\chi_{21}^{(17)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	-1	1	1	-1	-1
$\chi_{21}^{(18)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	-1	1	1	-1	-1
$\chi_{21}^{(19)}$	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
$\chi_{21}^{(20)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1
$\chi_{21}^{(21)}$	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1
$\chi_{21}^{(22)}$	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	-1	-1	1	1	-1	-1
$\chi_{21}^{(23)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1
$\chi_{21}^{(24)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_{21}^{(25)}$	1	1	1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	1	1	-1	-1
$\chi_{21}^{(26)}$	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1
$\chi_{21}^{(27)}$	1	-1	1	-1	1	-1	1	-1	1	-1	1	1	-1	1	-1	1	-1	1	-1	.	.	.	.	.	.
$\chi_{21}^{(28)}$	-1	1	-1	1	-1	1	-1	1	-1	1	-1	-1	1	-1	1	-1	1	-1	1	.	.	.	.	.	.
$\chi_{21}^{(29)}$	1	-1	1	1	-1	1	-1	-1	1	-1	1	1	-1	1	-1	-1	1	-1	1	.	.	.	.	.	.
$\chi_{21}^{(30)}$	-1	1	-1	-1	1	-1	1	1	-1	1	-1	-1	1	-1	1	1	-1	1	-1	.	.	.	.	.	.
$\chi_{21}^{(31)}$	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	.	.	.	.	.	.
$\chi_{21}^{(32)}$	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	.	.	.	.	.	.
$\chi_{21}^{(33)}$	1	-1	1	1	-1	1	-1	-1	1	-1	1	-1	1	-1	1	1	-1	1	-1	.	.	.	.	.	.
$\chi_{21}^{(34)}$	-1	1	-1	-1	1	-1	1	1	-1	1	-1	1	-1	1	-1	-1	1	-1	1	.	.	.	.	.	.
$\chi_{21}^{(35)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1	1	1	1	1
$\chi_{21}^{(36)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1	1	1	1	1
$\chi_{21}^{(37)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1	-1	-1	1	1
$\chi_{21}^{(38)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1	-1	-1	1	1
$\chi_{21}^{(39)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1	1	1	1	1
$\chi_{21}^{(40)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1	1	1	1	1
$\chi_{21}^{(41)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1	-1	-1	1	1
$\chi_{21}^{(42)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1	-1	-1	1	1
$\chi_{21}^{(43)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-2	-2	.	.	2	2
$\chi_{21}^{(44)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-2	-2	.	.	2	2
$\chi_{21}^{(45)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	.	.	.	.	.	.
$\chi_{21}^{(46)}$	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	.	.	.	.	.	.
$\chi_{21}^{(47)}$	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	.	.	.	.	.	.
$\chi_{21}^{(48)}$	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	.	.	.	.	.	.
$\chi_{21}^{(49)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	.	.	.	.	.	.
$\chi_{21}^{(50)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	.	.	.	.	.	.

	110														120													
$\chi_{21}^{(51)}$	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	.	.	.	.	.	.
$\chi_{21}^{(52)}$	1	1	1	-1	-1	-1	-1	1	1	1	1	1	1	1	-1	-1	-1	-1	.	.	.	.	.	.
$\chi_{21}^{(53)}$	2	2	2	.	.	.	.	-2	-2	-2	-2	.	.	.	.	.	.	.	-2	-2	.	.	2	2
$\chi_{21}^{(54)}$	-2	-2	-2	.	.	.	.	2	2	2	2	.	.	.	.	.	.	.	-2	-2	.	.	2	2
$\chi_{21}^{(55)}$	2	-2	2	.	.	.	.	2	-2	2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(56)}$	-2	2	-2	.	.	.	.	-2	2	-2	2	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(57)}$	1	-1	-1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	-1	1	-1	1	1				
$\chi_{21}^{(58)}$	-1	1	1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	1	-1	1	-1	-1				
$\chi_{21}^{(59)}$	-1	1	1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	-1	1	-1	1	-1				
$\chi_{21}^{(60)}$	1	-1	-1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	1	-1	1	-1	-1				
$\chi_{21}^{(61)}$	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	1	1	-1	-1				
$\chi_{21}^{(62)}$	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	-1	-1	1	-1				
$\chi_{21}^{(63)}$	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	-1	1	1	-1	-1				
$\chi_{21}^{(64)}$	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	1	-1	-1	1	-1				
$\chi_{21}^{(65)}$	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	-1	1	-1	1	-1				
$\chi_{21}^{(66)}$	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	1	-1	1	-1	-1				
$\chi_{21}^{(67)}$	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	1	-1	1	-1				
$\chi_{21}^{(68)}$	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	-1	1	-1	-1				
$\chi_{21}^{(69)}$	1	-1	-1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	-1	1	1	-1	-1				
$\chi_{21}^{(70)}$	-1	1	1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	1	-1	-1	1	-1				
$\chi_{21}^{(71)}$	-1	1	1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	-1	1	1	-1	-1				
$\chi_{21}^{(72)}$	1	-1	-1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	1	-1	-1	1	-1				
$\chi_{21}^{(73)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(74)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(75)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(76)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(77)}$	2	2	.	.	-2	-2			
$\chi_{21}^{(78)}$	2	2	.	.	-2	-2			
$\chi_{21}^{(79)}$	2	2	-2	.	.	.	.	-2	2	2	-2	2	-2	-2	2	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(80)}$	-2	-2	2	.	.	.	.	2	-2	-2	2	-2	2	2	-2	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(81)}$	2	2	-2	.	.	.	.	-2	2	2	-2	-2	2	2	-2	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(82)}$	-2	-2	2	.	.	.	.	2	-2	-2	2	2	-2	-2	2	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(83)}$	.	.	.	-2	2	2	-2	.	.	.	.	.	.	.	.	2	-2	-2	2	.	.	.	.	.
$\chi_{21}^{(84)}$	.	.	.	2	-2	-2	2	.	.	.	.	.	.	.	.	-2	2	2	-2	.	.	.	.	.
$\chi_{21}^{(85)}$	.	.	.	-2	2	2	-2	.	.	.	.	.	.	.	.	-2	2	2	-2	.	.	.	.	.
$\chi_{21}^{(86)}$	.	.	.	2	-2	-2	2	.	.	.	.	.	.	.	.	2	-2	-2	2	.	.	.	.	.
$\chi_{21}^{(87)}$	-2	-2	-2	.	.	.	.	2	2	2	2	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(88)}$	2	2	2	.	.	.	.	-2	-2	-2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(89)}$	2	2	-2	.	.	.	.	2	-2	-2	2	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(90)}$	2	2	-2	.	.	.	.	2	-2	-2	2	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(91)}$	-2	-2	2	.	.	.	.	-2	2	2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(92)}$	-2	-2	2	.	.	.	.	-2	2	2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(93)}$	1	-1	1	-1	1	-1	1	-1	1	-1	1	1	-1	1	-1	1	-1	1	-1	.	.	.	.	.
$\chi_{21}^{(94)}$	-1	1	-1	1	-1	1	-1	1	-1	1	-1	-1	1	-1	1	-1	1	-1	1	.	.	.	.	.
$\chi_{21}^{(95)}$	1	-1	1	1	-1	1	-1	-1	1	-1	1	1	-1	1	-1	-1	1	-1	1	.	.	.	.	.
$\chi_{21}^{(96)}$	-1	1	-1	-1	1	-1	1	1	-1	1	-1	-1	1	-1	1	1	-1	1	-1	.	.	.	.	.
$\chi_{21}^{(97)}$	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	.	.	.	.	.
$\chi_{21}^{(98)}$	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	.	.	.	.	.
$\chi_{21}^{(99)}$	1	-1	1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	.	.	.	.	.

	110										120														
$\chi_{21}^{(101)}$	-1	1	-1	1	-1	1	-1	1	-1	1	-1	-1	1	-1	1	-1	1	-1	1	.	.	.	.	.	.
$\chi_{21}^{(102)}$	1	-1	1	-1	1	-1	1	-1	1	-1	1	1	-1	1	-1	1	-1	1	-1	.	.	.	.	.	.
$\chi_{21}^{(103)}$	-1	1	-1	-1	1	-1	1	1	-1	1	-1	-1	1	-1	1	1	-1	1	-1	.	.	.	.	.	.
$\chi_{21}^{(104)}$	1	-1	1	1	-1	1	-1	-1	1	-1	1	1	-1	1	-1	-1	1	-1	1	.	.	.	.	.	.
$\chi_{21}^{(105)}$	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	.	.	.	.	.	.
$\chi_{21}^{(106)}$	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	.	.	.	.	.	.
$\chi_{21}^{(107)}$	-1	1	-1	-1	1	-1	1	1	-1	1	-1	1	-1	1	-1	-1	1	-1	1	.	.	.	.	.	.
$\chi_{21}^{(108)}$	1	-1	1	1	-1	1	-1	-1	1	-1	1	-1	1	-1	1	1	-1	1	-1	.	.	.	.	.	.
$\chi_{21}^{(109)}$	2	-2	-2	.	.	.	.	-2	-2	2	2	.	.	.	.	.	.	.	.	-2	2	.	.	2	-2
$\chi_{21}^{(110)}$	-2	2	2	.	.	.	.	2	2	-2	-2	.	.	.	.	.	.	.	.	2	-2	.	.	-2	2
$\chi_{21}^{(111)}$	-2	2	2	.	.	.	.	2	2	-2	-2	.	.	.	.	.	.	.	.	-2	2	.	.	2	-2
$\chi_{21}^{(112)}$	2	-2	-2	.	.	.	.	-2	-2	2	2	.	.	.	.	.	.	.	.	2	-2	.	.	-2	2
$\chi_{21}^{(113)}$	1	-1	-1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	.	.	.	.	.	.
$\chi_{21}^{(114)}$	-1	1	1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	.	.	.	.	.	.
$\chi_{21}^{(115)}$	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	.	.	.	.	.	.
$\chi_{21}^{(116)}$	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	.	.	.	.	.	.
$\chi_{21}^{(117)}$	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	.	.	.	.	.	.
$\chi_{21}^{(118)}$	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	.	.	.	.	.	.
$\chi_{21}^{(119)}$	1	-1	-1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	.	.	.	.	.	.
$\chi_{21}^{(120)}$	-1	1	1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	.	.	.	.	.	.
$\chi_{21}^{(121)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(122)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(123)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(124)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(125)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(126)}$	-1	-1	1	-1	1	1	-1	1	-1	-1	1	-1	1	1	-1	1	-1	-1	1	.	.	.	.	.	.
$\chi_{21}^{(127)}$	-1	-1	1	1	-1	-1	1	1	-1	-1	1	-1	1	1	-1	-1	1	1	-1	.	.	.	.	.	.
$\chi_{21}^{(128)}$	1	1	-1	-1	1	1	-1	-1	1	1	-1	1	-1	-1	1	1	-1	-1	1	.	.	.	.	.	.
$\chi_{21}^{(129)}$	1	1	-1	1	-1	-1	1	-1	1	1	-1	1	-1	-1	1	-1	1	1	-1	.	.	.	.	.	.
$\chi_{21}^{(130)}$	-1	-1	1	-1	1	1	-1	1	-1	-1	1	1	-1	-1	1	-1	1	1	-1	.	.	.	.	.	.
$\chi_{21}^{(131)}$	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	.	.	.	.	.	.
$\chi_{21}^{(132)}$	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	.	.	.	.	.	.
$\chi_{21}^{(133)}$	1	1	-1	1	-1	-1	1	-1	1	1	-1	-1	1	1	-1	1	-1	-1	1	.	.	.	.	.	.
$\chi_{21}^{(134)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(135)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	1	-1	1	-1	1
$\chi_{21}^{(136)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	1	-1	1	-1	1
$\chi_{21}^{(137)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	1	1	-1	-1	1
$\chi_{21}^{(138)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	1	1	-1	-1	1
$\chi_{21}^{(139)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	1	-1	1	-1	1
$\chi_{21}^{(140)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	1	-1	1	-1	1
$\chi_{21}^{(141)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	1	1	-1	-1	1
$\chi_{21}^{(142)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	1	1	-1	-1	1
$\chi_{21}^{(143)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	-1	1	-1	1	-1
$\chi_{21}^{(144)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	-1	1	-1	1	-1
$\chi_{21}^{(145)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	-1	-1	1	1	-1

	110										120										
$\chi_{21}^{(146)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	-1	-1	1	1	-1
$\chi_{21}^{(147)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	-1	1	-1	1	-1
$\chi_{21}^{(148)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	-1	1	-1	1	-1
$\chi_{21}^{(149)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	-1	-1	1	1	-1
$\chi_{21}^{(150)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	-1	-1	1	1	-1
$\chi_{21}^{(151)}$	2	-2	2	.	.	.	2	-2	2	-2	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(152)}$	-2	2	-2	.	.	.	-2	2	-2	2	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(153)}$	-2	2	-2	.	.	.	-2	2	-2	2	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(154)}$	2	-2	2	.	.	.	2	-2	2	-2	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(155)}$	2	-2	-2	.	.	.	-2	-2	2	2	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(156)}$	-2	2	2	.	.	.	2	2	-2	-2	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(157)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(158)}$	-2	-2	2	.	.	.	-2	2	2	-2	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(159)}$	2	2	-2	.	.	.	2	-2	-2	2	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(160)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(161)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(162)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(163)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(164)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-2	2	.	.	2	-2
$\chi_{21}^{(165)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-2	2	.	.	2	-2
$\chi_{21}^{(166)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2	-2	.	.	-2	2
$\chi_{21}^{(167)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2	-2	.	.	-2	2

	130										140										150									
$\chi_{21}^{(46)}$	.	.	.	.	.	2	2	2	2	2	2	-2	-2	-2	-2	-2	.	.	.	.	.	.	.	.
$\chi_{21}^{(47)}$	.	.	.	.	.	-2	-2	2	2	-2	-2	2	2	2	-2	-2	.	.	.	.	.	.	.	.
$\chi_{21}^{(48)}$	.	.	.	.	.	2	2	-2	-2	2	2	-2	-2	-2	2	2	.	.	.	.	.	.	.	.
$\chi_{21}^{(49)}$	.	.	.	.	.	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	.	.	.	.	.	.	.	.
$\chi_{21}^{(50)}$	.	.	.	.	.	2	2	2	2	2	2	2	2	2	2	2	.	.	.	.	.	.	.	.
$\chi_{21}^{(51)}$	.	.	.	.	.	-2	-2	2	2	-2	-2	-2	-2	-2	2	2	.	.	.	.	.	.	.	.
$\chi_{21}^{(52)}$	.	.	.	.	.	2	2	-2	-2	2	2	2	2	2	-2	-2	.	.	.	.	.	.	.	.
$\chi_{21}^{(53)}$	.	.	.	.	.	-6	-6	.	.	6	6	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(54)}$	.	.	.	.	.	6	6	.	.	-6	-6	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(55)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2	-2	.	.	-2	2	.	.
$\chi_{21}^{(56)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2	-2	.	.	-2	2	.	.
$\chi_{21}^{(57)}$	1	1	-1	1	-1	3	-1	-1	3	3	-1	-3	-3	1	1	-3	.	.	.	.	.	.	.	.
$\chi_{21}^{(58)}$	-1	-1	1	-1	1	-3	1	1	-3	-3	1	3	3	-1	-1	3	.	.	.	.	.	.	.	.
$\chi_{21}^{(59)}$	1	1	-1	1	-1	-3	1	1	-3	-3	1	3	3	-1	-1	3	.	.	.	.	.	.	.	.
$\chi_{21}^{(60)}$	-1	-1	1	-1	1	3	-1	-1	3	3	-1	-3	-3	1	1	-3	.	.	.	.	.	.	.	.
$\chi_{21}^{(61)}$	1	1	-1	-1	1	3	-1	1	-3	3	-1	-3	-3	1	-1	3	.	.	.	.	.	.	.	.
$\chi_{21}^{(62)}$	-1	-1	1	1	-1	-3	1	-1	3	-3	1	3	3	-1	1	-3	.	.	.	.	.	.	.	.
$\chi_{21}^{(63)}$	1	1	-1	-1	1	-3	1	-1	3	-3	1	3	3	-1	1	-3	.	.	.	.	.	.	.	.
$\chi_{21}^{(64)}$	-1	-1	1	1	-1	3	-1	1	-3	3	-1	-3	-3	1	-1	3	.	.	.	.	.	.	.	.
$\chi_{21}^{(65)}$	-1	-1	1	-1	1	3	-1	-1	3	3	-1	3	3	-1	-1	3	.	.	.	.	.	.	.	.
$\chi_{21}^{(66)}$	1	1	-1	1	-1	-3	1	1	-3	-3	1	-3	-3	1	1	-3	.	.	.	.	.	.	.	.
$\chi_{21}^{(67)}$	-1	-1	1	-1	1	-3	1	1	-3	-3	1	-3	-3	1	1	-3	.	.	.	.	.	.	.	.
$\chi_{21}^{(68)}$	1	1	-1	1	-1	3	-1	-1	3	3	-1	3	3	-1	-1	3	.	.	.	.	.	.	.	.
$\chi_{21}^{(69)}$	-1	-1	1	1	-1	3	-1	1	-3	3	-1	3	3	-1	1	-3	.	.	.	.	.	.	.	.
$\chi_{21}^{(70)}$	1	1	-1	-1	1	-3	1	-1	3	-3	1	-3	-3	1	-1	3	.	.	.	.	.	.	.	.
$\chi_{21}^{(71)}$	-1	-1	1	1	-1	-3	1	-1	3	-3	1	-3	-3	1	-1	3	.	.	.	.	.	.	.	.
$\chi_{21}^{(72)}$	1	1	-1	-1	1	3	-1	1	-3	3	-1	3	3	-1	1	-3	.	.	.	.	.	.	.	.
$\chi_{21}^{(73)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1	1	1	1	1	1	-1
$\chi_{21}^{(74)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1	-1	-1	1	1	1	-1
$\chi_{21}^{(75)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1	1	1	1	1	1	1
$\chi_{21}^{(76)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1	-1	-1	1	1	1	1
$\chi_{21}^{(77)}$	.	.	.	.	.	-6	-6	.	.	6	6	.	.	.	.	.	-2	-2	.	.	2	2	.	.
$\chi_{21}^{(78)}$	.	.	.	.	.	6	6	.	.	-6	-6	.	.	.	.	.	-2	-2	.	.	2	2	.	.
$\chi_{21}^{(79)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(80)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(81)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(82)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(83)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(84)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(85)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(86)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(87)}$	.	.	.	.	.	-4	-4	.	.	4	4	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(88)}$	.	.	.	.	.	4	4	.	.	-4	-4	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(89)}$	4	-4	.	.	.	.	.	.	.	.	.	-8	8	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(90)}$	-4	4	.	.	.	.	.	.	.	.	.	8	-8	.	.	.	.	.	.	.	.	.	.	.

	130										140										150									
$\chi_{21}^{(91)}$	-4	4	.	.	.	.	.	.	.	.	-8	8	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(92)}$	4	-4	.	.	.	.	.	.	.	.	8	-8	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(93)}$	-1	1	1	-1	-1	1	1								
$\chi_{21}^{(94)}$	-1	1	1	-1	-1	1	1								
$\chi_{21}^{(95)}$	-1	1	-1	1	-1	1	1								
$\chi_{21}^{(96)}$	-1	1	-1	1	-1	1	1								
$\chi_{21}^{(97)}$	-1	1	1	-1	-1	1	-1								
$\chi_{21}^{(98)}$	-1	1	1	-1	-1	1	-1								
$\chi_{21}^{(99)}$	-1	1	-1	1	-1	1	-1								
$\chi_{21}^{(100)}$	-1	1	-1	1	-1	1	-1								
$\chi_{21}^{(101)}$								
$\chi_{21}^{(102)}$								
$\chi_{21}^{(103)}$								
$\chi_{21}^{(104)}$								
$\chi_{21}^{(105)}$								
$\chi_{21}^{(106)}$								
$\chi_{21}^{(107)}$								
$\chi_{21}^{(108)}$								
$\chi_{21}^{(109)}$	6	-2	.	.	-6	2	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(110)}$	-6	2	.	.	6	-2	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(111)}$	-6	2	.	.	6	-2	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(112)}$	6	-2	.	.	-6	2	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(113)}$	-6	2	2	-6	-6	2	6	6	-2	-2	6								
$\chi_{21}^{(114)}$	6	-2	-2	6	6	-2	-6	-6	2	2	-6								
$\chi_{21}^{(115)}$	-6	2	-2	6	-6	2	6	6	-2	2	-6								
$\chi_{21}^{(116)}$	6	-2	2	-6	6	-2	-6	-6	2	-2	6								
$\chi_{21}^{(117)}$	-6	2	2	-6	-6	2	-6	-6	2	2	-6								
$\chi_{21}^{(118)}$	6	-2	-2	6	6	-2	6	6	-2	-2	6								
$\chi_{21}^{(119)}$	-6	2	-2	6	-6	2	-6	-6	2	-2	6								
$\chi_{21}^{(120)}$	6	-2	2	-6	6	-2	6	6	-2	2	-6								
$\chi_{21}^{(121)}$	2	2	.	.	-2	-2								
$\chi_{21}^{(122)}$	1	-1	-1	1	1	-1								
$\chi_{21}^{(123)}$	1	-1	1	-1	1	-1								
$\chi_{21}^{(124)}$	1	-1	-1	1	1	-1								
$\chi_{21}^{(125)}$	1	-1	1	-1	1	-1								
$\chi_{21}^{(126)}$								
$\chi_{21}^{(127)}$								
$\chi_{21}^{(128)}$								
$\chi_{21}^{(129)}$								
$\chi_{21}^{(130)}$								
$\chi_{21}^{(131)}$								
$\chi_{21}^{(132)}$								
$\chi_{21}^{(133)}$								
$\chi_{21}^{(134)}$								
$\chi_{21}^{(135)}$	1	1	-1	1	-1	-3	1	1	-3	-3	1	3	3	-1	-1	3								

	130										140										150									
$\chi_{21}^{(136)}$	1	1	-1	1	-1	3	-1	-1	3	3	-1	-3	-3	1	1	-3	.	.	.	.	.	.	.	.
$\chi_{21}^{(137)}$	1	1	-1	-1	1	-3	1	-1	3	-3	1	3	3	-1	1	-3	.	.	.	.	.	.	.	.
$\chi_{21}^{(138)}$	1	1	-1	-1	1	3	-1	1	-3	3	-1	-3	-3	1	-1	3	.	.	.	.	.	.	.	.
$\chi_{21}^{(139)}$	-1	-1	1	-1	1	-3	1	1	-3	-3	1	-3	-3	1	1	-3	.	.	.	.	.	.	.	.
$\chi_{21}^{(140)}$	-1	-1	1	-1	1	3	-1	-1	3	3	-1	3	3	-1	-1	3	.	.	.	.	.	.	.	.
$\chi_{21}^{(141)}$	-1	-1	1	1	-1	-3	1	-1	3	-3	1	-3	-3	1	-1	3	.	.	.	.	.	.	.	.
$\chi_{21}^{(142)}$	-1	-1	1	1	-1	3	-1	1	-3	3	-1	3	3	-1	1	-3	.	.	.	.	.	.	.	.
$\chi_{21}^{(143)}$	-1	-1	1	-1	1	-3	1	1	-3	-3	1	3	3	-1	-1	3	.	.	.	.	.	.	.	.
$\chi_{21}^{(144)}$	-1	-1	1	-1	1	3	-1	-1	3	3	-1	-3	-3	1	1	-3	.	.	.	.	.	.	.	.
$\chi_{21}^{(145)}$	-1	-1	1	1	-1	-3	1	-1	3	-3	1	3	3	-1	1	-3	.	.	.	.	.	.	.	.
$\chi_{21}^{(146)}$	-1	-1	1	1	-1	3	-1	1	-3	3	-1	-3	-3	1	-1	3	.	.	.	.	.	.	.	.
$\chi_{21}^{(147)}$	1	1	-1	1	-1	-3	1	1	-3	-3	1	-3	-3	1	1	-3	.	.	.	.	.	.	.	.
$\chi_{21}^{(148)}$	1	1	-1	1	-1	3	-1	-1	3	3	-1	3	3	-1	-1	3	.	.	.	.	.	.	.	.
$\chi_{21}^{(149)}$	1	1	-1	-1	1	-3	1	-1	3	-3	1	-3	-3	1	-1	3	.	.	.	.	.	.	.	.
$\chi_{21}^{(150)}$	1	1	-1	-1	1	3	-1	1	-3	3	-1	3	3	-1	1	-3	.	.	.	.	.	.	.	.
$\chi_{21}^{(151)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-2	2	.	.	2	-2	.	.
$\chi_{21}^{(152)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-2	2	.	.	2	-2	.	.
$\chi_{21}^{(153)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(154)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(155)}$	.	.	.	.	.	-12	4	.	.	12	-4	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(156)}$	.	.	.	.	.	12	-4	.	.	-12	4	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(157)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2	-2	.	.	-2	2	.	.
$\chi_{21}^{(158)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(159)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(160)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(161)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(162)}$	-16	16						
$\chi_{21}^{(163)}$	16	-16						
$\chi_{21}^{(164)}$	-6	2	.	.	6	-2						
$\chi_{21}^{(165)}$	6	-2	.	.	-6	2						
$\chi_{21}^{(166)}$	-6	2	.	.	6	-2						
$\chi_{21}^{(167)}$	6	-2	.	.	-6	2						

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$\chi_{21}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{21}^{(2)}$	-1	1	1	1	1	-1	1	1	-1	-1	1	-1	1	-1	1	-1
$\chi_{21}^{(3)}$	-1	1	1	1	1	-1	1	1	-1	-1	1	1	-1	1	-1	1
$\chi_{21}^{(4)}$	1	-1	-1	1	1	-1	1	1	1	1	-1	-1	1	-1	-1	1
$\chi_{21}^{(5)}$	1	-1	-1	1	1	-1	1	1	1	1	-1	1	-1	1	1	-1
$\chi_{21}^{(6)}$	-1	-1	-1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	1	1
$\chi_{21}^{(7)}$	-1	-1	-1	1	1	1	1	1	-1	-1	-1	1	1	1	-1	-1
$\chi_{21}^{(8)}$	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1
$\chi_{21}^{(9)}$	.	.	.	2	2	.	-2	-2	.	.	.	-2	.	2	.	.
$\chi_{21}^{(10)}$	.	.	.	2	2	.	-2	-2	.	.	.	2	.	-2	.	.
$\chi_{21}^{(11)}$	.	.	.	-1	-1	-1	-1	-1	1	1	1	-1	-1	-1	1	1
$\chi_{21}^{(12)}$	.	.	.	-1	-1	-1	-1	-1	1	1	1	1	1	1	-1	-1
$\chi_{21}^{(13)}$	.	.	.	-1	-1	1	-1	-1	1	1	-1	-1	1	-1	1	-1
$\chi_{21}^{(14)}$	.	.	.	-1	-1	1	-1	-1	1	1	-1	1	-1	1	-1	1
$\chi_{21}^{(15)}$	.	.	.	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_{21}^{(16)}$	.	.	.	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1
$\chi_{21}^{(17)}$	.	.	.	-1	-1	1	-1	-1	-1	-1	1	-1	1	-1	-1	1
$\chi_{21}^{(18)}$	.	.	.	-1	-1	1	-1	-1	-1	-1	1	1	-1	1	1	-1
$\chi_{21}^{(19)}$	.	.	.	2	2	2	2	2	-2	-2	-2	.	.	.	.	.
$\chi_{21}^{(20)}$	.	.	.	2	2	2	2	2	-2	-2	-2	.	.	.	.	.
$\chi_{21}^{(21)}$	.	.	.	2	2	-2	2	2	-2	-2	2	.	.	.	.	.
$\chi_{21}^{(22)}$	.	.	.	2	2	-2	2	2	-2	-2	2	.	.	.	.	.
$\chi_{21}^{(23)}$	.	.	.	2	2	2	2	2	2	2	2	.	.	.	.	.
$\chi_{21}^{(24)}$	.	.	.	2	2	2	2	2	2	2	2	.	.	.	.	.
$\chi_{21}^{(25)}$	.	.	.	2	2	-2	2	2	2	2	-2	.	.	.	.	.
$\chi_{21}^{(26)}$	.	.	.	2	2	-2	2	2	2	2	-2	.	.	.	.	.
$\chi_{21}^{(27)}$	1	1	-1	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(28)}$	1	1	-1	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(29)}$	1	-1	1	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(30)}$	1	-1	1	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(31)}$	-1	-1	1	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(32)}$	-1	-1	1	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(33)}$	-1	1	-1	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(34)}$	-1	1	-1	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(35)}$	1	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(36)}$	1	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(37)}$	1	-1	-1	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(38)}$	1	-1	-1	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(39)}$	-1	-1	-1	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{21}^{(40)}$	-1	-1	-1
$\chi_{21}^{(41)}$	-1	1	1
$\chi_{21}^{(42)}$	-1	1	1
$\chi_{21}^{(43)}$.	.	.	-2	-2	.	2	2	.	.	.	-2	.	2	.	.
$\chi_{21}^{(44)}$.	.	.	-2	-2	.	2	2	.	.	.	2	.	-2	.	.
$\chi_{21}^{(45)}$.	.	.	1	1	1	1	1	-1	-1	-1	1	1	1	-1	-1

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$\chi_{21}^{(46)}$.	.	.	1	1	1	1	1	-1	-1	-1	-1	-1	1	1	1
$\chi_{21}^{(47)}$.	.	.	1	1	-1	1	1	-1	-1	1	1	-1	1	-1	1
$\chi_{21}^{(48)}$.	.	.	1	1	-1	1	1	-1	-1	1	-1	1	-1	1	-1
$\chi_{21}^{(49)}$.	.	.	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{21}^{(50)}$.	.	.	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1
$\chi_{21}^{(51)}$.	.	.	1	1	-1	1	1	1	1	-1	1	-1	1	1	-1
$\chi_{21}^{(52)}$.	.	.	1	1	-1	1	1	1	1	-1	-1	1	-1	-1	1
$\chi_{21}^{(53)}$.	.	.	4	4	.	-4	-4	.	.	.	.	.	.	.	.
$\chi_{21}^{(54)}$.	.	.	4	4	.	-4	-4	.	.	.	.	.	.	.	.
$\chi_{21}^{(55)}$
$\chi_{21}^{(56)}$
$\chi_{21}^{(57)}$
$\chi_{21}^{(58)}$
$\chi_{21}^{(59)}$
$\chi_{21}^{(60)}$
$\chi_{21}^{(61)}$
$\chi_{21}^{(62)}$
$\chi_{21}^{(63)}$
$\chi_{21}^{(64)}$
$\chi_{21}^{(65)}$
$\chi_{21}^{(66)}$
$\chi_{21}^{(67)}$
$\chi_{21}^{(68)}$
$\chi_{21}^{(69)}$
$\chi_{21}^{(70)}$
$\chi_{21}^{(71)}$
$\chi_{21}^{(72)}$
$\chi_{21}^{(73)}$	-1	-1	-1	-2	-2	-2	-2	-2	2	2	2	.	.	.	.	.
$\chi_{21}^{(74)}$	-1	1	1	-2	-2	2	-2	-2	2	2	-2	.	.	.	.	.
$\chi_{21}^{(75)}$	1	1	1	-2	-2	-2	-2	-2	-2	-2	-2	.	.	.	.	.
$\chi_{21}^{(76)}$	1	-1	-1	-2	-2	2	-2	-2	-2	-2	2	.	.	.	.	.
$\chi_{21}^{(77)}$
$\chi_{21}^{(78)}$
$\chi_{21}^{(79)}$.	.	.	2	-2	.	2	-2	-2	2	.	.	.	.	.	.
$\chi_{21}^{(80)}$.	.	.	2	-2	.	2	-2	-2	2	.	.	.	.	.	.
$\chi_{21}^{(81)}$.	.	.	2	-2	.	2	-2	2	-2	.	.	.	.	.	.
$\chi_{21}^{(82)}$.	.	.	2	-2	.	2	-2	2	-2	.	.	.	.	.	.
$\chi_{21}^{(83)}$.	.	.	2	-2	.	2	-2	-2	2	.	.	.	.	.	.
$\chi_{21}^{(84)}$.	.	.	2	-2	.	2	-2	-2	2	.	.	.	.	.	.
$\chi_{21}^{(85)}$.	.	.	2	-2	.	2	-2	2	-2
$\chi_{21}^{(86)}$.	.	.	2	-2	.	2	-2	2	-2
$\chi_{21}^{(87)}$.	.	.	2	2	.	-2	-2	.	.	.	2	.	-2	.	.
$\chi_{21}^{(88)}$.	.	.	2	2	.	-2	-2	.	.	.	-2	.	2	.	.
$\chi_{21}^{(89)}$.	.	.	2	-2	.	-2	2	-2	2	.
$\chi_{21}^{(90)}$.	.	.	2	-2	.	-2	2	2	-2	.

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$\chi_{21}^{(136)}$
$\chi_{21}^{(137)}$
$\chi_{21}^{(138)}$
$\chi_{21}^{(139)}$
$\chi_{21}^{(140)}$
$\chi_{21}^{(141)}$
$\chi_{21}^{(142)}$
$\chi_{21}^{(143)}$
$\chi_{21}^{(144)}$
$\chi_{21}^{(145)}$
$\chi_{21}^{(146)}$
$\chi_{21}^{(147)}$
$\chi_{21}^{(148)}$
$\chi_{21}^{(149)}$
$\chi_{21}^{(150)}$
$\chi_{21}^{(151)}$
$\chi_{21}^{(152)}$
$\chi_{21}^{(153)}$
$\chi_{21}^{(154)}$
$\chi_{21}^{(155)}$
$\chi_{21}^{(156)}$
$\chi_{21}^{(157)}$
$\chi_{21}^{(158)}$.	.	.	-4	4	.	4	-4	.	.	.	.	.	.	.	.
$\chi_{21}^{(159)}$.	.	.	-4	4	.	4	-4	.	.	.	.	.	.	.	.
$\chi_{21}^{(160)}$.	.	.	2	-2	.	2	-2	-2	2	.	.	.	.	.	.
$\chi_{21}^{(161)}$.	.	.	2	-2	.	2	-2	2	-2	.	.	.	.	.	.
$\chi_{21}^{(162)}$.	.	.	2	-2	.	-2	2	.	.	.	.	.	2	-2	.
$\chi_{21}^{(163)}$.	.	.	2	-2	.	-2	2	.	.	.	.	.	-2	2	.
$\chi_{21}^{(164)}$
$\chi_{21}^{(165)}$
$\chi_{21}^{(166)}$
$\chi_{21}^{(167)}$

The generators of $G^{s_{22}}$ are:

$$\begin{pmatrix} -1 & 0 & 1 & 0 & -1 & 1 & -1 & 0 \\ -2 & 0 & 2 & -1 & 0 & 1 & -2 & 1 \\ -2 & 1 & 2 & -1 & -1 & 2 & -3 & 1 \\ -3 & 1 & 4 & -2 & -1 & 2 & -4 & 2 \\ -3 & 1 & 3 & -1 & -1 & 1 & -3 & 2 \\ -2 & 1 & 2 & -1 & 0 & 0 & -2 & 1 \\ -1 & 0 & 1 & 0 & 0 & 0 & -2 & 1 \\ -1 & 0 & 1 & 0 & 0 & 0 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 0 & 1 & -1 & 1 & 0 & 0 \\ -1 & 0 & 0 & 1 & -1 & 1 & 0 & 0 \\ -1 & -1 & 1 & 1 & -1 & 1 & 0 & 0 \\ -1 & -1 & 0 & 2 & -1 & 1 & 0 & 0 \\ -1 & -1 & 0 & 1 & 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 1 & -1 & 0 & 0 & 0 & 1 \\ 0 & 1 & 2 & -2 & 0 & 0 & 0 & 2 \\ 0 & 0 & 3 & -2 & 0 & 0 & 0 & 2 \\ 0 & 0 & 4 & -3 & 0 & 0 & 0 & 4 \\ 0 & 0 & 3 & -3 & 1 & 0 & 0 & 3 \\ 0 & 0 & 2 & -2 & 0 & 1 & 0 & 2 \\ 0 & 0 & 1 & -1 & 0 & 0 & 1 & 1 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix},$$

$$\begin{pmatrix} 0 & -2 & -1 & 1 & 1 & 0 & 0 & 0 \\ -1 & -2 & -1 & 1 & 1 & 1 & -1 & 1 \\ -1 & -3 & -1 & 1 & 2 & 0 & 0 & 1 \\ -1 & -4 & -2 & 1 & 3 & 1 & -1 & 2 \\ -1 & -3 & -1 & 0 & 3 & 1 & -1 & 1 \\ 0 & -2 & -1 & 0 & 2 & 1 & -1 & 1 \\ 0 & -1 & -1 & 0 & 1 & 1 & 0 & 0 \\ 0 & 0 & -1 & 0 & 1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 0 & 0 & 0 & 2 & -1 & -1 \\ -1 & -1 & 0 & 0 & 0 & 3 & -2 & 0 \\ -1 & -1 & 1 & -1 & 0 & 4 & -2 & -1 \\ -1 & -2 & 1 & -1 & 0 & 6 & -4 & 0 \\ -1 & -2 & 1 & -1 & 1 & 4 & -3 & 0 \\ 0 & -1 & 0 & -1 & 1 & 3 & -2 & 0 \\ 0 & -1 & 0 & 0 & 0 & 2 & -1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 1 & 0 & -1 & -1 & 0 & 1 \\ -1 & 2 & 2 & -1 & 0 & -2 & 0 & 1 \\ -1 & 2 & 2 & 0 & -1 & -2 & -1 & 2 \\ -2 & 3 & 3 & 0 & -1 & -4 & 0 & 2 \\ -2 & 3 & 2 & 0 & -1 & -3 & 0 & 2 \\ -2 & 2 & 2 & 0 & -1 & -2 & 0 & 1 \\ -1 & 1 & 1 & 0 & 0 & -2 & 0 & 1 \\ -1 & 0 & 1 & 0 & 0 & -1 & 0 & 1 \end{pmatrix}, \\
\begin{pmatrix} 0 & 2 & 0 & -1 & 0 & -1 & 1 & 0 \\ -1 & 3 & 1 & -2 & 1 & -2 & 1 & 0 \\ -1 & 4 & 0 & -2 & 1 & -2 & 1 & 0 \\ -2 & 6 & 1 & -3 & 1 & -3 & 2 & -1 \\ -2 & 5 & 1 & -2 & 0 & -2 & 1 & 0 \\ -2 & 3 & 1 & -1 & 0 & -2 & 1 & 0 \\ -1 & 2 & 1 & -1 & 0 & -1 & 0 & 0 \\ -1 & 1 & 1 & -1 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 1 & 0 & 1 & -1 & 0 & -1 \\ 1 & -1 & 1 & 0 & 1 & -2 & 1 & -2 \\ 1 & -2 & 2 & 0 & 1 & -2 & 1 & -2 \\ 1 & -3 & 3 & 0 & 2 & -4 & 2 & -3 \\ 1 & -3 & 2 & 0 & 2 & -3 & 2 & -3 \\ 0 & -2 & 2 & 0 & 1 & -2 & 2 & -3 \\ 0 & -1 & 1 & 0 & 1 & -2 & 2 & -2 \\ 0 & -1 & 0 & 1 & 0 & -1 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 0 & -1 & 2 & -1 & 1 & -2 \\ 1 & 0 & 0 & -1 & 2 & -2 & 2 & -3 \\ 1 & 0 & 0 & -2 & 3 & -2 & 3 & -4 \\ 1 & 0 & 1 & -3 & 4 & -3 & 4 & -6 \\ 1 & -1 & 1 & -2 & 3 & -2 & 3 & -5 \\ 0 & -1 & 1 & -1 & 2 & -2 & 3 & -4 \\ 0 & 0 & 1 & -1 & 1 & -1 & 2 & -3 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & -2 \end{pmatrix}, \\
\begin{pmatrix} 0 & 1 & 0 & 0 & -2 & 2 & -1 & 1 \\ 1 & 0 & -1 & 1 & -3 & 3 & -1 & 1 \\ 1 & 1 & -1 & 1 & -4 & 4 & -2 & 1 \\ 2 & 1 & -2 & 2 & -6 & 6 & -3 & 2 \\ 2 & 1 & -2 & 2 & -5 & 4 & -2 & 2 \\ 2 & 1 & -2 & 1 & -3 & 3 & -2 & 2 \\ 1 & 0 & -1 & 1 & -2 & 2 & -2 & 2 \\ 1 & 0 & 0 & 0 & -1 & 1 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & -1 & 1 & -1 & 0 & 0 & 2 \\ 1 & -1 & -2 & 2 & -2 & 1 & 0 & 2 \\ 1 & -1 & -3 & 3 & -2 & 0 & 0 & 3 \\ 2 & -1 & -5 & 4 & -3 & 1 & 0 & 4 \\ 2 & 0 & -4 & 3 & -3 & 1 & 0 & 3 \\ 2 & 0 & -3 & 2 & -2 & 1 & -1 & 3 \\ 1 & 0 & -2 & 1 & -1 & 1 & -1 & 2 \\ 1 & 0 & -1 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & -2 & -1 & 1 & 1 & 0 & 0 & 0 \\ 1 & -3 & -2 & 2 & 0 & 1 & 0 & 0 \\ 1 & -4 & -2 & 2 & 1 & 0 & 1 & 0 \\ 1 & -6 & -3 & 3 & 1 & 1 & 1 & 0 \\ 1 & -5 & -2 & 2 & 1 & 1 & 1 & -1 \\ 0 & -4 & -1 & 2 & 0 & 1 & 1 & -1 \\ 0 & -2 & -1 & 1 & 0 & 1 & 1 & -1 \\ 0 & -1 & -1 & 1 & 0 & 0 & 1 & -1 \end{pmatrix}, \\
\begin{pmatrix} 0 & -1 & 0 & 0 & 0 & 2 & -1 & -1 \\ 1 & -2 & -1 & 1 & -1 & 3 & -1 & -1 \\ 1 & -2 & 0 & 0 & -1 & 4 & -1 & -2 \\ 1 & -4 & 0 & 1 & -2 & 6 & -2 & -2 \\ 1 & -4 & 0 & 1 & -1 & 4 & -1 & -2 \\ 0 & -3 & 0 & 1 & -1 & 3 & 0 & -2 \\ 0 & -2 & 0 & 1 & -1 & 2 & 0 & -1 \\ 0 & -1 & 0 & 1 & -1 & 1 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 1 & 0 & -1 & -1 & 0 & 1 \\ 1 & 1 & 1 & 0 & -1 & -2 & 1 & 0 \\ 1 & 1 & 1 & 1 & -2 & -2 & 0 & 1 \\ 2 & 2 & 1 & 1 & -2 & -4 & 1 & 1 \\ 2 & 2 & 0 & 1 & -2 & -3 & 1 & 1 \\ 2 & 2 & 0 & 0 & -1 & -2 & 0 & 1 \\ 1 & 1 & 0 & 0 & 0 & -2 & 0 & 1 \\ 1 & 0 & 0 & 0 & 0 & -1 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 2 & 0 & -1 & 0 & -1 & 1 & 0 \\ 1 & 2 & 0 & -1 & 0 & -2 & 2 & -1 \\ 1 & 3 & -1 & -1 & 0 & -2 & 2 & -1 \\ 2 & 5 & -1 & -2 & 0 & -3 & 3 & -2 \\ 2 & 4 & -1 & -1 & -1 & -2 & 2 & -1 \\ 2 & 3 & -1 & -1 & 0 & -2 & 1 & 0 \\ 1 & 2 & 0 & -1 & 0 & -1 & 0 & 0 \\ 1 & 1 & 0 & -1 & 0 & 0 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 0 & -1 & 1 & 0 & 1 & -1 & 0 & -1 \\ -1 & 0 & 2 & -1 & 2 & -2 & 0 & -1 \\ -1 & -1 & 3 & -1 & 2 & -2 & 0 & -1 \\ -1 & -1 & 4 & -2 & 4 & -4 & 0 & -1 \\ -1 & -1 & 3 & -2 & 4 & -3 & 0 & -1 \\ -1 & -1 & 3 & -2 & 3 & -2 & 0 & -1 \\ -1 & -1 & 2 & -1 & 2 & -2 & 1 & -1 \\ -1 & -1 & 1 & 0 & 1 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 0 & -1 & 2 & -1 & 1 & -2 \\ -1 & 1 & 1 & -2 & 3 & -2 & 1 & -2 \\ -1 & 1 & 1 & -3 & 4 & -2 & 2 & -3 \\ -1 & 2 & 2 & -5 & 6 & -3 & 2 & -4 \\ -1 & 1 & 2 & -4 & 5 & -2 & 1 & -3 \\ -1 & 0 & 2 & -3 & 4 & -2 & 1 & -2 \\ -1 & 0 & 2 & -2 & 2 & -1 & 1 & -2 \\ -1 & 0 & 1 & -1 & 1 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 0 & 0 & -2 & 2 & -1 & 1 \\ -1 & 1 & 0 & 0 & -2 & 3 & -2 & 2 \\ -1 & 2 & 0 & 0 & -3 & 4 & -3 & 2 \\ -2 & 2 & 0 & 1 & -5 & 6 & -4 & 3 \\ -2 & 2 & 0 & 1 & -4 & 4 & -3 & 3 \\ -1 & 2 & -1 & 1 & -3 & 3 & -2 & 2 \\ 0 & 1 & -1 & 1 & -2 & 2 & -2 & 2 \\ 0 & 1 & 0 & 0 & -1 & 1 & -1 & 1 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} 0 & 0 & -1 & 1 & -1 & 0 & 0 & 2 \\ -1 & 0 & -1 & 1 & -1 & 1 & -1 & 3 \\ -1 & 0 & -2 & 2 & -1 & 0 & -1 & 4 \\ -2 & 0 & -3 & 3 & -2 & 1 & -1 & 5 \\ -2 & 1 & -2 & 2 & -2 & 1 & -1 & 4 \\ -1 & 1 & -2 & 2 & -2 & 1 & -1 & 3 \\ 0 & 1 & -2 & 1 & -1 & 1 & -1 & 2 \\ 0 & 1 & -1 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & -2 & -1 & 1 & 1 & 0 & 0 & 0 \\ -1 & -2 & -1 & 1 & 1 & 1 & -1 & 1 \\ -1 & -3 & -1 & 1 & 2 & 0 & 0 & 1 \\ -1 & -4 & -2 & 1 & 3 & 1 & -1 & 2 \\ -1 & -3 & -1 & 0 & 3 & 1 & -1 & 1 \\ -1 & -3 & 0 & 0 & 2 & 1 & -1 & 1 \\ -1 & -2 & 0 & 0 & 1 & 1 & 0 & 0 \\ -1 & -1 & 0 & 0 & 1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 0 & 0 & 0 & 2 & -1 & -1 \\ -1 & -1 & 0 & 0 & 0 & 3 & -2 & 0 \\ -1 & -1 & 1 & -1 & 0 & 4 & -2 & -1 \\ -1 & -2 & 1 & -1 & 0 & 6 & -4 & 0 \\ -1 & -2 & 1 & -1 & 1 & 4 & -3 & 0 \\ -1 & -2 & 1 & -1 & 1 & 3 & -2 & 0 \\ -1 & -2 & 1 & 0 & 0 & 2 & -1 & 0 \\ -1 & -1 & 1 & 0 & 0 & 1 & -1 & 0 \end{pmatrix}, \\
\begin{pmatrix} 0 & 1 & 1 & 0 & -1 & -1 & 0 & 1 \\ -1 & 2 & 2 & -1 & 0 & -2 & 0 & 1 \\ -1 & 2 & 2 & 0 & -1 & -2 & -1 & 2 \\ -2 & 3 & 3 & 0 & -1 & -4 & 0 & 2 \\ -2 & 3 & 2 & 0 & -1 & -3 & 0 & 2 \\ -1 & 3 & 1 & 0 & -1 & -2 & 0 & 1 \\ 0 & 2 & 0 & 0 & 0 & -2 & 0 & 1 \\ 0 & 1 & 0 & 0 & 0 & -1 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 2 & 0 & -1 & 0 & -1 & 1 & 0 \\ -1 & 3 & 1 & -2 & 1 & -2 & 1 & 0 \\ -1 & 4 & 0 & -2 & 1 & -2 & 1 & 0 \\ -2 & 6 & 1 & -3 & 1 & -3 & 2 & -1 \\ -2 & 5 & 1 & -2 & 0 & -2 & 1 & 0 \\ -1 & 4 & 0 & -1 & 0 & -2 & 1 & 0 \\ 0 & 3 & 0 & -1 & 0 & -1 & 0 & 0 \\ 0 & 2 & 0 & -1 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 0 & -1 & 0 & 1 & 1 & 0 \\ -1 & 0 & 0 & -1 & 0 & 2 & 0 & 1 \\ -1 & 0 & 0 & -2 & 1 & 2 & 1 & 0 \\ -1 & 0 & 0 & -3 & 1 & 4 & 0 & 1 \\ -1 & 0 & 1 & -3 & 1 & 3 & 0 & 1 \\ -1 & -1 & 1 & -2 & 1 & 2 & 0 & 1 \\ -1 & -1 & 1 & -1 & 0 & 2 & 0 & 0 \\ -1 & 0 & 1 & -1 & 0 & 1 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 0 & -1 & 1 & 0 & -1 & 1 & 0 & 1 \\ -1 & -1 & 1 & 0 & -1 & 2 & -1 & 2 \\ -1 & -2 & 2 & 0 & -1 & 2 & -1 & 2 \\ -1 & -3 & 2 & 0 & -1 & 3 & -2 & 4 \\ -1 & -2 & 2 & -1 & 0 & 2 & -1 & 3 \\ -1 & -2 & 2 & -1 & 0 & 2 & -1 & 2 \\ -1 & -2 & 1 & 0 & 0 & 1 & 0 & 1 \\ -1 & -1 & 1 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & -1 & 1 & 1 & -2 & 0 & 0 \\ -1 & 1 & 0 & 0 & 2 & -3 & 0 & 0 \\ -1 & 1 & -1 & 1 & 2 & -4 & 0 & 1 \\ -2 & 2 & -1 & 1 & 3 & -6 & 1 & 0 \\ -2 & 2 & -1 & 1 & 2 & -4 & 0 & 0 \\ -1 & 2 & -1 & 1 & 1 & -3 & 0 & 0 \\ 0 & 2 & -1 & 0 & 1 & -2 & 0 & 0 \\ 0 & 1 & -1 & 0 & 1 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 0 & 0 & 0 & 0 & -1 & -1 \\ -1 & 2 & 1 & -1 & 1 & -1 & -1 & -1 \\ -1 & 3 & 1 & -1 & 0 & 0 & -2 & -1 \\ -2 & 4 & 2 & -1 & 0 & -1 & -2 & -2 \\ -2 & 3 & 1 & 0 & 0 & -1 & -2 & -1 \\ -1 & 3 & 0 & 0 & 0 & -1 & -1 & -1 \\ 0 & 2 & 0 & 0 & 0 & -1 & -1 & 0 \\ 0 & 1 & 0 & 0 & 0 & 0 & -1 & 0 \end{pmatrix}, \\
\begin{pmatrix} 0 & -1 & 1 & 0 & 1 & -1 & 0 & -1 \\ 1 & -1 & 1 & 0 & 1 & -2 & 1 & -2 \\ 1 & -2 & 2 & 0 & 1 & -2 & 1 & -2 \\ 1 & -3 & 3 & 0 & 2 & -4 & 2 & -3 \\ 1 & -3 & 2 & 0 & 2 & -3 & 2 & -3 \\ 1 & -2 & 2 & -1 & 2 & -2 & 1 & -2 \\ 1 & -1 & 1 & -1 & 2 & -2 & 1 & -1 \\ 1 & -1 & 0 & 0 & 1 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 0 & -1 & 2 & -1 & 1 & -2 \\ 1 & 0 & 0 & -1 & 2 & -2 & 2 & -3 \\ 1 & 0 & 0 & -2 & 3 & -2 & 3 & -4 \\ 1 & 0 & 1 & -3 & 4 & -3 & 4 & -6 \\ 1 & -1 & 1 & -2 & 3 & -2 & 3 & -5 \\ 1 & -1 & 1 & -2 & 3 & -2 & 2 & -3 \\ 1 & 0 & 1 & -2 & 2 & -1 & 1 & -2 \\ 1 & 0 & 0 & -1 & 1 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 0 & 0 & -2 & 2 & -1 & 1 \\ 1 & 0 & -1 & 1 & -3 & 3 & -1 & 1 \\ 1 & 1 & -1 & 1 & -4 & 4 & -2 & 1 \\ 2 & 1 & -2 & 2 & -6 & 6 & -3 & 2 \\ 2 & 1 & -2 & 2 & -5 & 4 & -2 & 2 \\ 1 & 1 & -2 & 2 & -4 & 3 & -1 & 1 \\ 0 & 0 & -1 & 2 & -3 & 2 & -1 & 1 \\ 0 & 0 & 0 & 1 & -2 & 1 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 0 & 0 & -1 & 1 & -1 & 0 & 0 & 2 \\ 1 & -1 & -2 & 2 & -2 & 1 & 0 & 2 \\ 1 & -1 & -3 & 3 & -2 & 0 & 0 & 3 \\ 2 & -1 & -5 & 4 & -3 & 1 & 0 & 4 \\ 2 & 0 & -4 & 3 & -3 & 1 & 0 & 3 \\ 1 & 0 & -3 & 3 & -3 & 1 & 0 & 2 \\ 0 & 0 & -2 & 2 & -2 & 1 & 0 & 1 \\ 0 & 0 & -1 & 1 & -1 & 0 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -2 & -1 & 1 & 1 & 0 & 0 & 0 \\ 1 & -3 & -2 & 2 & 0 & 1 & 0 & 0 \\ 1 & -4 & -2 & 2 & 1 & 0 & 1 & 0 \\ 1 & -6 & -3 & 3 & 1 & 1 & 1 & 0 \\ 1 & -5 & -2 & 2 & 1 & 1 & 1 & -1 \\ 1 & -4 & -1 & 1 & 1 & 1 & 0 & 0 \\ 1 & -2 & -1 & 0 & 1 & 1 & 0 & 0 \\ 1 & -1 & -1 & 0 & 1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 0 & 0 & 0 & 2 & -1 & -1 \\ 1 & -2 & -1 & 1 & -1 & 3 & -1 & -1 \\ 1 & -2 & 0 & 0 & -1 & 4 & -1 & -2 \\ 1 & -4 & 0 & 1 & -2 & 6 & -2 & -2 \\ 1 & -4 & 0 & 1 & -1 & 4 & -1 & -2 \\ 1 & -3 & 0 & 0 & 0 & 3 & -1 & -1 \\ 1 & -2 & 0 & 0 & 0 & 2 & -1 & 0 \\ 1 & -1 & 0 & 0 & 0 & 1 & -1 & 0 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} 0 & 1 & 1 & 0 & -1 & -1 & 0 & 1 \\ 1 & 1 & 1 & 0 & -1 & -2 & 1 & 0 \\ 1 & 1 & 1 & 1 & -2 & -2 & 0 & 1 \\ 2 & 2 & 1 & 1 & -2 & -4 & 1 & 1 \\ 2 & 2 & 0 & 1 & -2 & -3 & 1 & 1 \\ 1 & 2 & 0 & 1 & -2 & -2 & 1 & 0 \\ 0 & 1 & 0 & 1 & -1 & -2 & 1 & 0 \\ 0 & 0 & 0 & 1 & -1 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 2 & 0 & -1 & 0 & -1 & 1 & 0 \\ 1 & 2 & 0 & -1 & 0 & -2 & 2 & -1 \\ 1 & 3 & -1 & -1 & 0 & -2 & 2 & -1 \\ 2 & 5 & -1 & -2 & 0 & -3 & 3 & -2 \\ 2 & 4 & -1 & -1 & -1 & -2 & 2 & -1 \\ 1 & 3 & -1 & 0 & -1 & -2 & 2 & -1 \\ 0 & 2 & 0 & 0 & -1 & -1 & 1 & -1 \\ 0 & 1 & 0 & 0 & -1 & 0 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 1 & -1 & 1 & -2 & 2 & 0 \\ 1 & 0 & 1 & -1 & 1 & -3 & 3 & -1 \\ 1 & -1 & 1 & -1 & 2 & -4 & 4 & -1 \\ 1 & -1 & 2 & -2 & 3 & -6 & 6 & -2 \\ 1 & -1 & 2 & -2 & 2 & -4 & 5 & -2 \\ 1 & -1 & 2 & -2 & 2 & -3 & 3 & -1 \\ 1 & 0 & 1 & -2 & 2 & -2 & 2 & -1 \\ 1 & 0 & 0 & -1 & 1 & -1 & 1 & 0 \end{pmatrix}, \\
\begin{pmatrix} 0 & 1 & 2 & -2 & 0 & 0 & 1 & -1 \\ 1 & 1 & 2 & -2 & 0 & -1 & 2 & -2 \\ 1 & 1 & 3 & -3 & 0 & 0 & 2 & -3 \\ 1 & 1 & 5 & -4 & 0 & -1 & 3 & -4 \\ 1 & 0 & 4 & -3 & 0 & -1 & 3 & -3 \\ 1 & 0 & 3 & -3 & 1 & -1 & 2 & -2 \\ 1 & 0 & 2 & -2 & 1 & -1 & 1 & -1 \\ 1 & 0 & 1 & -1 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -1 & -1 & 2 & -1 & 1 & -2 & 1 \\ 1 & -2 & -2 & 3 & -2 & 2 & -2 & 1 \\ 1 & -2 & -2 & 4 & -3 & 2 & -3 & 2 \\ 2 & -3 & -4 & 6 & -4 & 3 & -4 & 3 \\ 2 & -2 & -4 & 5 & -3 & 2 & -3 & 2 \\ 1 & -1 & -3 & 4 & -3 & 2 & -2 & 1 \\ 0 & -1 & -2 & 3 & -2 & 1 & -1 & 1 \\ 0 & -1 & -1 & 2 & -1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 & -2 & 1 & 0 & 1 & -1 & 0 \\ 1 & -1 & -3 & 2 & -1 & 2 & -1 & 0 \\ 1 & 0 & -4 & 2 & -1 & 2 & -1 & 0 \\ 2 & 0 & -6 & 3 & -2 & 4 & -2 & 0 \\ 2 & 0 & -5 & 3 & -2 & 3 & -2 & 0 \\ 1 & 0 & -4 & 3 & -2 & 2 & -1 & 0 \\ 0 & 0 & -2 & 2 & -2 & 2 & -1 & 0 \\ 0 & 0 & -1 & 1 & -1 & 1 & 0 & -1 \end{pmatrix}, \\
\begin{pmatrix} 0 & -1 & 0 & 1 & 0 & 0 & -2 & 1 \\ -1 & 0 & 0 & 1 & 0 & 0 & -3 & 2 \\ -1 & -1 & 1 & 1 & 0 & 0 & -4 & 3 \\ -1 & -1 & 0 & 2 & 0 & 0 & -6 & 5 \\ -1 & -1 & 0 & 1 & 1 & 0 & -5 & 4 \\ 0 & 0 & 0 & 0 & 1 & 0 & -4 & 3 \\ 0 & 0 & 0 & 0 & 1 & -1 & -2 & 2 \\ 0 & 0 & 0 & 0 & 1 & -1 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & -1 & 0 & 1 & 0 & -1 & 0 \\ -1 & 1 & -1 & 0 & 1 & 0 & -2 & 1 \\ -1 & 1 & -1 & -1 & 2 & 0 & -2 & 1 \\ -1 & 2 & -2 & -1 & 2 & 1 & -4 & 2 \\ -1 & 1 & -1 & -1 & 2 & 1 & -4 & 2 \\ 0 & 1 & -1 & -1 & 2 & 0 & -3 & 2 \\ 0 & 1 & 0 & -1 & 1 & 0 & -2 & 1 \\ 0 & 1 & 0 & -1 & 1 & 0 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 1 & -1 & -1 & 1 & 1 & -1 \\ -1 & 1 & 2 & -2 & 0 & 1 & 1 & -1 \\ -1 & 2 & 2 & -2 & -1 & 2 & 1 & -2 \\ -2 & 2 & 4 & -3 & -1 & 2 & 2 & -3 \\ -2 & 2 & 3 & -2 & -1 & 1 & 2 & -2 \\ -2 & 1 & 2 & -1 & -1 & 1 & 2 & -2 \\ -1 & 0 & 1 & 0 & -1 & 1 & 1 & -1 \\ -1 & 0 & 1 & 0 & -1 & 1 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 0 & 0 & 0 & 0 & 0 & -1 & 2 & 0 \\ -1 & 0 & 1 & -1 & 1 & -1 & 2 & 0 \\ -1 & 0 & 0 & 0 & 1 & -2 & 3 & 0 \\ -2 & 0 & 1 & -1 & 2 & -3 & 5 & -1 \\ -2 & 1 & 1 & -1 & 1 & -2 & 4 & -1 \\ -2 & 0 & 1 & 0 & 0 & -1 & 3 & -1 \\ -1 & 0 & 0 & 0 & 0 & 0 & 2 & -1 \\ -1 & 0 & 0 & 0 & 0 & 0 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 & -2 & 2 & 0 & -1 & 0 & 0 \\ -1 & 1 & -2 & 2 & 0 & -1 & -1 & 1 \\ -1 & 1 & -3 & 3 & 0 & -2 & 0 & 1 \\ -1 & 2 & -5 & 4 & 0 & -2 & -1 & 2 \\ -1 & 2 & -4 & 3 & 0 & -1 & -1 & 1 \\ 0 & 2 & -3 & 2 & 0 & -1 & -1 & 1 \\ 0 & 2 & -2 & 1 & 0 & -1 & 0 & 0 \\ 0 & 1 & -1 & 0 & 1 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 1 & -1 & 1 & -1 & 1 & -1 & -1 \\ -1 & 2 & -1 & 1 & -1 & 1 & -2 & 0 \\ -1 & 3 & -1 & 1 & -2 & 2 & -2 & -1 \\ -1 & 4 & -2 & 2 & -3 & 3 & -4 & 0 \\ -1 & 3 & -2 & 2 & -2 & 2 & -3 & 0 \\ 0 & 3 & -2 & 1 & -1 & 1 & -2 & 0 \\ 0 & 2 & -1 & 1 & -1 & 0 & -1 & 0 \\ 0 & 1 & 0 & 0 & 0 & 0 & -1 & 0 \end{pmatrix}, \\
\begin{pmatrix} 0 & -1 & 2 & -1 & 0 & 0 & 0 & 1 \\ -1 & -1 & 3 & -2 & 1 & 0 & 0 & 1 \\ -1 & -2 & 4 & -2 & 1 & 0 & -1 & 2 \\ -2 & -3 & 6 & -3 & 2 & -1 & 0 & 2 \\ -2 & -2 & 5 & -3 & 2 & -1 & 0 & 2 \\ -2 & -2 & 4 & -2 & 1 & 0 & 0 & 1 \\ -1 & -2 & 2 & -1 & 1 & 0 & 0 & 1 \\ -1 & -1 & 1 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 1 & -2 & 1 & 0 & 1 & 0 \\ -1 & 0 & 2 & -3 & 2 & 0 & 1 & 0 \\ -1 & 0 & 2 & -4 & 3 & 0 & 1 & 0 \\ -2 & 0 & 4 & -6 & 4 & 0 & 2 & -1 \\ -2 & 0 & 4 & -5 & 3 & 0 & 1 & 0 \\ -2 & -1 & 3 & -3 & 2 & 0 & 1 & 0 \\ -1 & -1 & 2 & -2 & 1 & 1 & 0 & 0 \\ -1 & 0 & 1 & -1 & 0 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 0 & 1 & 0 & 0 & -2 & 1 \\ 1 & -1 & -1 & 2 & -1 & 0 & -2 & 1 \\ 1 & -2 & 0 & 2 & -1 & 0 & -3 & 2 \\ 1 & -3 & -1 & 4 & -2 & 0 & -4 & 3 \\ 1 & -3 & -1 & 3 & -1 & 0 & -3 & 2 \\ 0 & -2 & 0 & 2 & -1 & 0 & -2 & 1 \\ 0 & -1 & 0 & 1 & 0 & -1 & -1 & 1 \\ 0 & -1 & 0 & 1 & 0 & -1 & 0 & 0 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} 0 & 0 & -1 & 0 & 1 & 0 & -1 & 0 \\ 1 & 0 & -2 & 1 & 0 & 0 & -1 & 0 \\ 1 & 0 & -2 & 0 & 1 & 0 & -1 & 0 \\ 1 & 0 & -3 & 1 & 0 & 1 & -2 & 0 \\ 1 & -1 & -2 & 1 & 0 & 1 & -2 & 0 \\ 0 & -1 & -1 & 1 & 0 & 0 & -1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & -1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 1 & -1 & -1 & 1 & 1 & -1 \\ 1 & 0 & 1 & -1 & -1 & 1 & 2 & -2 \\ 1 & 1 & 1 & -1 & -2 & 2 & 2 & -3 \\ 2 & 1 & 2 & -2 & -2 & 2 & 3 & -4 \\ 2 & 1 & 1 & -1 & -2 & 1 & 3 & -3 \\ 2 & 1 & 0 & -1 & -1 & 1 & 2 & -2 \\ 1 & 0 & 0 & 0 & -1 & 1 & 1 & -1 \\ 1 & 0 & 0 & 0 & -1 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 0 & 0 & 0 & -1 & 2 & 0 \\ 1 & -1 & 0 & 0 & 0 & -1 & 3 & -1 \\ 1 & -1 & -1 & 1 & 0 & -2 & 4 & -1 \\ 2 & -1 & -1 & 0 & 1 & -3 & 6 & -2 \\ 2 & 0 & -1 & 0 & 0 & -2 & 5 & -2 \\ 2 & 0 & -1 & 0 & 0 & -1 & 3 & -1 \\ 1 & 0 & -1 & 0 & 0 & 0 & 2 & -1 \\ 1 & 0 & -1 & 0 & 0 & 0 & 1 & 0 \end{pmatrix}, \\
\begin{pmatrix} 0 & 0 & -2 & 2 & 0 & -1 & 0 & 0 \\ 1 & 0 & -3 & 3 & -1 & -1 & 0 & 0 \\ 1 & 0 & -4 & 4 & -1 & -2 & 1 & 0 \\ 1 & 0 & -6 & 6 & -2 & -2 & 1 & 0 \\ 1 & 0 & -5 & 5 & -2 & -1 & 1 & -1 \\ 0 & 0 & -3 & 4 & -2 & -1 & 1 & -1 \\ 0 & 1 & -2 & 2 & -1 & -1 & 1 & -1 \\ 0 & 0 & -1 & 1 & 0 & -1 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 1 & -1 & 1 & -1 & 1 & -1 & -1 \\ 1 & 1 & -2 & 2 & -2 & 1 & -1 & -1 \\ 1 & 2 & -2 & 2 & -3 & 2 & -1 & -2 \\ 1 & 2 & -3 & 4 & -5 & 3 & -2 & -2 \\ 1 & 1 & -3 & 4 & -4 & 2 & -1 & -2 \\ 0 & 1 & -2 & 3 & -3 & 1 & 0 & -2 \\ 0 & 1 & -1 & 2 & -2 & 0 & 0 & -1 \\ 0 & 0 & 0 & 1 & -1 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 2 & -1 & 0 & 0 & 0 & 1 \\ 1 & -2 & 2 & -1 & 0 & 0 & 1 & 0 \\ 1 & -3 & 3 & -1 & 0 & 0 & 0 & 1 \\ 2 & -4 & 4 & -2 & 1 & -1 & 1 & 1 \\ 2 & -3 & 3 & -2 & 1 & -1 & 1 & 1 \\ 2 & -2 & 2 & -2 & 1 & 0 & 0 & 1 \\ 1 & -2 & 1 & -1 & 1 & 0 & 0 & 1 \\ 1 & -1 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \\
\begin{pmatrix} 0 & 0 & 1 & -2 & 1 & 0 & 1 & 0 \\ 1 & -1 & 1 & -2 & 1 & 0 & 2 & -1 \\ 1 & -1 & 1 & -3 & 2 & 0 & 2 & -1 \\ 2 & -1 & 2 & -5 & 3 & 0 & 3 & -2 \\ 2 & -1 & 2 & -4 & 2 & 0 & 2 & -1 \\ 2 & -1 & 1 & -3 & 2 & 0 & 1 & 0 \\ 1 & -1 & 1 & -2 & 1 & 1 & 0 & 0 \\ 1 & 0 & 0 & -1 & 0 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 1 & 0 & 1 & -1 & -1 & 0 \\ -1 & 0 & 2 & -1 & 2 & -2 & -1 & 0 \\ -1 & -1 & 3 & -1 & 2 & -2 & -2 & 1 \\ -1 & -1 & 4 & -2 & 4 & -4 & -2 & 1 \\ -1 & -1 & 3 & -2 & 4 & -3 & -2 & 1 \\ 0 & 0 & 2 & -2 & 3 & -2 & -2 & 1 \\ 0 & 0 & 1 & -1 & 2 & -2 & -1 & 1 \\ 0 & 0 & 0 & 0 & 1 & -1 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 0 & -1 & 2 & -1 & 0 & -1 \\ -1 & 1 & 1 & -2 & 3 & -2 & 0 & -1 \\ -1 & 1 & 1 & -3 & 4 & -2 & 0 & -1 \\ -1 & 2 & 2 & -5 & 6 & -3 & 0 & -2 \\ -1 & 1 & 2 & -4 & 5 & -2 & -1 & -1 \\ 0 & 1 & 1 & -3 & 4 & -2 & -1 & 0 \\ 0 & 1 & 1 & -2 & 2 & -1 & -1 & 0 \\ 0 & 1 & 0 & -1 & 1 & 0 & -1 & 0 \end{pmatrix}, \\
\begin{pmatrix} 0 & 1 & 0 & 0 & -2 & 2 & 0 & 0 \\ -1 & 1 & 0 & 0 & -2 & 3 & -1 & 1 \\ -1 & 2 & 0 & 0 & -3 & 4 & -1 & 0 \\ -2 & 2 & 0 & 1 & -5 & 6 & -2 & 1 \\ -2 & 2 & 0 & 1 & -4 & 4 & -1 & 1 \\ -2 & 1 & 0 & 1 & -3 & 3 & 0 & 0 \\ -1 & 0 & 0 & 1 & -2 & 2 & 0 & 0 \\ -1 & 0 & 1 & 0 & -1 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 & -1 & 1 & -1 & 0 & 1 & 1 \\ -1 & 0 & -1 & 1 & -1 & 1 & 0 & 2 \\ -1 & 0 & -2 & 2 & -1 & 0 & 1 & 2 \\ -2 & 0 & -3 & 3 & -2 & 1 & 1 & 3 \\ -2 & 1 & -2 & 2 & -2 & 1 & 1 & 2 \\ -2 & 0 & -1 & 2 & -2 & 1 & 1 & 1 \\ -1 & 0 & -1 & 1 & -1 & 1 & 1 & 0 \\ -1 & 0 & 0 & 0 & 0 & 0 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 1 & 0 & 1 & -1 & -1 & 0 \\ 1 & -1 & 1 & 0 & 1 & -2 & 0 & -1 \\ 1 & -2 & 2 & 0 & 1 & -2 & -1 & 0 \\ 1 & -3 & 3 & 0 & 2 & -4 & 0 & -1 \\ 1 & -3 & 2 & 0 & 2 & -3 & 0 & -1 \\ 0 & -2 & 2 & 0 & 1 & -2 & 0 & -1 \\ 0 & -1 & 1 & 0 & 1 & -2 & 0 & 0 \\ 0 & -1 & 0 & 1 & 0 & -1 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 0 & 0 & 0 & -1 & 2 & -1 & 0 & -1 \\ 1 & 0 & 0 & -1 & 2 & -2 & 1 & -2 \\ 1 & 0 & 0 & -2 & 3 & -2 & 1 & -2 \\ 1 & 0 & 1 & -3 & 4 & -3 & 2 & -4 \\ 1 & -1 & 1 & -2 & 3 & -2 & 1 & -3 \\ 0 & -1 & 1 & -1 & 2 & -2 & 1 & -2 \\ 0 & 0 & 1 & -1 & 1 & -1 & 0 & -1 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 0 & 0 & -2 & 2 & 0 & 0 \\ 1 & 0 & -1 & 1 & -3 & 3 & 0 & 0 \\ 1 & 1 & -1 & 1 & -4 & 4 & 0 & -1 \\ 2 & 1 & -2 & 2 & -6 & 6 & -1 & 0 \\ 2 & 1 & -2 & 2 & -5 & 4 & 0 & 0 \\ 2 & 1 & -2 & 1 & -3 & 3 & 0 & 0 \\ 1 & 0 & -1 & 1 & -2 & 2 & 0 & 0 \\ 1 & 0 & 0 & 0 & -1 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 & -1 & 1 & -1 & 0 & 1 & 1 \\ 1 & -1 & -2 & 2 & -2 & 1 & 1 & 1 \\ 1 & -1 & -3 & 3 & -2 & 0 & 2 & 1 \\ 2 & -1 & -5 & 4 & -3 & 1 & 2 & 2 \\ 2 & 0 & -4 & 3 & -3 & 1 & 2 & 1 \\ 2 & 0 & -3 & 2 & -2 & 1 & 1 & 1 \\ 1 & 0 & -2 & 1 & -1 & 1 & 1 & 0 \\ 1 & 0 & -1 & 0 & 0 & 0 & 1 & 0 \end{pmatrix}.
\end{pmatrix}$$

The character table of $G^{s_{22}}$:

	10										20																			
$\chi_{22}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
$\chi_{22}^{(2)}$	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	-1	-1	-1	-1	1	
$\chi_{22}^{(3)}$	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	-1	
$\chi_{22}^{(4)}$	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	
$\chi_{22}^{(5)}$	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	1	1	1	-1	-1	
$\chi_{22}^{(6)}$	1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
$\chi_{22}^{(7)}$	1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	
$\chi_{22}^{(8)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	
$\chi_{22}^{(9)}$	1	-1	A	-A	-A	A	1	-1	-1	1	-A	A	-1	1	-A	A	A	-A	-1	1	A	-A	-1	1	-1	1	-1	1	-A	
$\chi_{22}^{(10)}$	1	-1	-A	A	A	-A	1	-1	-1	1	A	-A	-1	1	A	-A	-A	A	-1	1	-A	A	-1	1	-1	1	-1	1	A	
$\chi_{22}^{(11)}$	1	-1	A	-A	-A	A	1	-1	-1	1	-A	A	-1	1	-A	A	A	-A	-1	1	A	-A	-1	1	1	-1	-1	-1	A	
$\chi_{22}^{(12)}$	1	-1	-A	A	A	-A	1	-1	-1	1	A	-A	-1	1	A	-A	-A	A	-1	1	-A	A	-1	1	1	-1	-1	-1	-A	
$\chi_{22}^{(13)}$	1	-1	A	-A	-A	A	1	-1	-1	1	-A	A	1	-1	A	-A	-A	A	1	-1	-A	A	1	-1	-1	-1	1	-1	-A	
$\chi_{22}^{(14)}$	1	-1	-A	A	A	-A	1	-1	-1	1	A	-A	1	-1	-A	A	A	-A	1	-1	A	-A	1	-1	-1	-1	1	1	A	
$\chi_{22}^{(15)}$	1	-1	A	-A	-A	A	1	-1	-1	1	-A	A	1	-1	A	-A	-A	A	1	-1	-A	A	1	-1	1	-1	-1	-1	A	
$\chi_{22}^{(16)}$	1	-1	-A	A	A	-A	1	-1	-1	1	A	-A	1	-1	-A	A	A	-A	1	-1	A	-A	1	-1	1	-1	-1	-1	-A	
$\chi_{22}^{(17)}$	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	-2	-2	-2	
$\chi_{22}^{(18)}$	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	2	2	2	
$\chi_{22}^{(19)}$	4	4	-4	-4	-4	-4	4	4	4	4	-4	-4	4	4	-4	-4	-4	-4	4	4	-4	-4	4	4	-4	-4	-2	-2	2	
$\chi_{22}^{(20)}$	4	4	-4	-4	-4	-4	4	4	4	4	-4	-4	4	4	-4	-4	-4	-4	4	4	-4	-4	4	4	-4	-4	2	2	-2	
$\chi_{22}^{(21)}$	4	4	4	4	4	4	4	4	4	4	4	4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-2	-2	-2	
$\chi_{22}^{(22)}$	4	4	4	4	4	4	4	4	4	4	4	4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	2	2	2	
$\chi_{22}^{(23)}$	4	4	-4	-4	-4	-4	4	4	4	4	-4	-4	-4	-4	4	4	4	4	-4	-4	4	4	-4	-4	-4	-4	-2	-2	2	
$\chi_{22}^{(24)}$	4	4	-4	-4	-4	-4	4	4	4	4	-4	-4	-4	-4	4	4	4	4	-4	-4	4	4	-4	-4	-4	-4	2	2	-2	
$\chi_{22}^{(25)}$	4	-4	B	-B	-B	B	4	-4	-4	4	-B	B	-4	4	-B	B	B	-B	-4	4	B	-B	-4	4	-2	2	2	-2	I	
$\chi_{22}^{(26)}$	4	-4	-B	B	B	-B	4	-4	-4	4	B	-B	-4	4	B	-B	-B	B	-4	4	-B	B	-4	4	-2	2	-2	-2	-I	
$\chi_{22}^{(27)}$	4	-4	B	-B	-B	B	4	-4	-4	4	-B	B	-4	4	-B	B	B	-B	-4	4	B	-B	-4	4	2	-2	-2	-2	-I	
$\chi_{22}^{(28)}$	4	-4	-B	B	B	-B	4	-4	-4	4	B	-B	-4	4	B	-B	-B	B	-4	4	-B	B	-4	4	2	-2	-2	-2	I	
$\chi_{22}^{(29)}$	4	-4	B	-B	-B	B	4	-4	-4	4	-B	B	4	-4	B	-B	-B	B	4	-4	-B	B	4	-4	-2	2	2	-2	I	
$\chi_{22}^{(30)}$	4	-4	-B	B	B	-B	4	-4	-4	4	B	-B	4	-4	-B	B	B	-B	4	-4	B	-B	4	-4	-2	2	-2	-2	-I	
$\chi_{22}^{(31)}$	4	-4	B	-B	-B	B	4	-4	-4	4	-B	B	4	-4	B	-B	-B	B	4	-4	-B	B	4	-4	2	-2	-2	-2	-I	
$\chi_{22}^{(32)}$	4	-4	-B	B	B	-B	4	-4	-4	4	B	-B	4	-4	-B	B	B	-B	4	-4	B	-B	4	-4	2	-2	-2	-2	I	
$\chi_{22}^{(33)}$	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	-1	-1	-1	
$\chi_{22}^{(34)}$	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	1	1	1	
$\chi_{22}^{(35)}$	5	5	-5	-5	-5	-5	5	5	5	5	-5	-5	5	5	-5	-5	-5	-5	5	5	-5	-5	5	5	-5	-5	-1	-1	1	
$\chi_{22}^{(36)}$	5	5	-5	-5	-5	-5	5	5	5	5	-5	-5	5	5	-5	-5	-5	-5	5	5	-5	-5	5	5	-5	-5	1	1	-1	
$\chi_{22}^{(37)}$	5	5	5	5	5	5	5	5	5	5	5	5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-1	-1	-1	
$\chi_{22}^{(38)}$	5	5	5	5	5	5	5	5	5	5	5	5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	1	1	1	
$\chi_{22}^{(39)}$	5	5	-5	-5	-5	-5	5	5	5	5	-5	-5	-5	-5	5	5	5	5	-5	-5	5	5	-5	-5	-5	-5	-1	-1	1	
$\chi_{22}^{(40)}$	5	5	-5	-5	-5	-5	5	5	5	5	-5	-5	-5	-5	5	5	5	5	-5	-5	5	5	-5	-5	-5	-5	1	1	-1	
$\chi_{22}^{(41)}$	5	5	5	5	-3	-3	-3	-3	1	1	1	1	-3	-3	-3	-3	5	5	5	5	1	1	1	1	3	3	3	3	3	
$\chi_{22}^{(42)}$	5	5	5	5	-3	-3	-3	-3	1	1	1	1	-3	-3	-3	-3	5	5	5	5	1	1	1	1	-3	-3	-3	-3	-3	
$\chi_{22}^{(43)}$	5	5	-5	-5	3	3	-3	-3	1	1	-1	-1	-3	-3	3	3	-5	-5	5	5	-1	-1	1	1	3	3	3	3	-3	
$\chi_{22}^{(44)}$	5	5	-5	-5	3	3	-3	-3	1	1	-1	-1	-3	-3	3	3	-5	-5	5	5	-1	-1	1	1	-3	-3	-3	-3	3	
$\chi_{22}^{(45)}$	5	5	5	5	-3	-3	-3	-3	1	1	1	1	3	3	3	3	-5	-5	-5	-5	-1	-1	-1	-1	3	3	3	3	3	

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$\chi_{22}^{(46)}$	5	5	5	5	-3	-3	-3	-3	1	1	1	1	3	3	3	3	-5	-5	-5	-5	-1	-1	-1	-1	-3	-3	-3	-3
$\chi_{22}^{(47)}$	5	5	-5	-5	3	3	-3	-3	1	1	-1	-1	3	3	-3	-3	5	5	-5	-5	1	1	-1	-1	3	3	-3	-3
$\chi_{22}^{(48)}$	5	5	-5	-5	3	3	-3	-3	1	1	-1	-1	3	3	-3	-3	5	5	-5	-5	1	1	-1	-1	-3	-3	3	3
$\chi_{22}^{(49)}$	5	-5	C	-C	-C	C	5	-5	-5	5	-C	C	-5	5	-C	C	C	-C	-5	5	C	-C	-5	5	-1	1	-A	-A
$\chi_{22}^{(50)}$	5	-5	-C	C	C	-C	5	-5	-5	5	C	-C	-5	5	C	-C	-C	C	-5	5	-C	C	-5	5	-1	1	A	A
$\chi_{22}^{(51)}$	5	-5	C	-C	-C	C	5	-5	-5	5	-C	C	-5	5	-C	C	C	-C	-5	5	C	-C	-5	5	1	-1	A	A
$\chi_{22}^{(52)}$	5	-5	-C	C	C	-C	5	-5	-5	5	C	-C	-5	5	C	-C	-C	C	-5	5	-C	C	-5	5	1	-1	-A	-A
$\chi_{22}^{(53)}$	5	-5	C	-C	-C	C	5	-5	-5	5	-C	C	5	-5	C	-C	-C	C	5	-5	-C	C	5	-5	-1	1	-A	-A
$\chi_{22}^{(54)}$	5	-5	-C	C	C	-C	5	-5	-5	5	C	-C	5	-5	-C	C	C	-C	5	-5	C	-C	5	-5	-1	1	A	A
$\chi_{22}^{(55)}$	5	-5	C	-C	-C	C	5	-5	-5	5	-C	C	5	-5	C	-C	-C	C	5	-5	-C	C	5	-5	1	-1	A	A
$\chi_{22}^{(56)}$	5	-5	-C	C	C	-C	5	-5	-5	5	C	-C	5	-5	-C	C	C	-C	5	-5	C	-C	5	-5	1	-1	-A	-A
$\chi_{22}^{(57)}$	5	-5	C	-C	H	-H	-3	3	-1	1	-A	A	3	-3	H	-H	C	-C	-5	5	A	-A	-1	1	3	-3	H	H
$\chi_{22}^{(58)}$	5	-5	-C	C	-H	H	-3	3	-1	1	A	-A	3	-3	-H	H	-C	C	-5	5	-A	A	-1	1	3	-3	-H	-H
$\chi_{22}^{(59)}$	5	-5	C	-C	H	-H	-3	3	-1	1	-A	A	3	-3	H	-H	C	-C	-5	5	A	-A	-1	1	-3	3	-H	-H
$\chi_{22}^{(60)}$	5	-5	-C	C	-H	H	-3	3	-1	1	A	-A	3	-3	-H	H	-C	C	-5	5	-A	A	-1	1	-3	3	H	H
$\chi_{22}^{(61)}$	5	-5	C	-C	H	-H	-3	3	-1	1	-A	A	-3	3	-H	H	-C	C	5	-5	-A	A	1	-1	3	-3	H	H
$\chi_{22}^{(62)}$	5	-5	-C	C	-H	H	-3	3	-1	1	A	-A	-3	3	H	-H	C	-C	5	-5	A	-A	1	-1	3	-3	-H	-H
$\chi_{22}^{(63)}$	5	-5	C	-C	H	-H	-3	3	-1	1	-A	A	-3	3	-H	H	-C	C	5	-5	-A	A	1	-1	-3	3	-H	-H
$\chi_{22}^{(64)}$	5	-5	-C	C	-H	H	-3	3	-1	1	A	-A	-3	3	H	-H	C	-C	5	-5	A	-A	1	-1	-3	3	H	H
$\chi_{22}^{(65)}$	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
$\chi_{22}^{(66)}$	6	6	-6	-6	-6	-6	6	6	6	6	-6	-6	6	6	-6	-6	-6	-6	6	6	-6	-6	6	6	6	6	6	6
$\chi_{22}^{(67)}$	6	6	6	6	6	6	6	6	6	6	6	6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6
$\chi_{22}^{(68)}$	6	6	-6	-6	-6	-6	6	6	6	6	-6	-6	-6	-6	6	6	6	6	-6	-6	6	6	-6	-6	-6	-6	-6	-6
$\chi_{22}^{(69)}$	6	-6	D	-D	-D	D	6	-6	-6	6	-D	D	-6	6	-D	D	D	-D	-6	6	D	-D	-6	6	6	6	6	6
$\chi_{22}^{(70)}$	6	-6	-D	D	D	-D	6	-6	-6	6	D	-D	-6	6	D	-D	-D	D	-6	6	-D	D	-6	6	6	6	6	6
$\chi_{22}^{(71)}$	6	-6	D	-D	-D	D	6	-6	-6	6	-D	D	6	-6	D	-D	-D	D	6	-6	-D	D	6	-6	6	6	6	6
$\chi_{22}^{(72)}$	6	-6	-D	D	D	-D	6	-6	-6	6	D	-D	6	-6	-D	D	D	-D	6	-6	D	-D	6	-6	6	6	6	6
$\chi_{22}^{(73)}$	10	10	10	10	2	2	2	2	-2	-2	-2	-2	2	2	2	2	10	10	10	10	-2	-2	-2	-2	-4	-4	-4	-4
$\chi_{22}^{(74)}$	10	10	10	10	2	2	2	2	-2	-2	-2	-2	2	2	2	2	10	10	10	10	-2	-2	-2	-2	-2	-2	-2	-2
$\chi_{22}^{(75)}$	10	10	10	10	2	2	2	2	-2	-2	-2	-2	2	2	2	2	10	10	10	10	-2	-2	-2	-2	4	4	4	4
$\chi_{22}^{(76)}$	10	10	10	10	2	2	2	2	-2	-2	-2	-2	2	2	2	2	10	10	10	10	-2	-2	-2	-2	2	2	2	2
$\chi_{22}^{(77)}$	10	10	-10	-10	-2	-2	2	2	-2	-2	2	2	2	2	-2	-2	-10	-10	10	10	2	2	-2	-2	-4	-4	4	4
$\chi_{22}^{(78)}$	10	10	-10	-10	-2	-2	2	2	-2	-2	2	2	2	2	-2	-2	-10	-10	10	10	2	2	-2	-2	-2	-2	2	2
$\chi_{22}^{(79)}$	10	10	-10	-10	-2	-2	2	2	-2	-2	2	2	2	2	-2	-2	-10	-10	10	10	2	2	-2	-2	4	4	-4	-4
$\chi_{22}^{(80)}$	10	10	-10	-10	-2	-2	2	2	-2	-2	2	2	2	2	-2	-2	-10	-10	10	10	2	2	-2	-2	2	2	-2	-2
$\chi_{22}^{(81)}$	10	10	10	10	2	2	2	2	-2	-2	-2	-2	-2	-2	-2	-2	-10	-10	-10	-10	2	2	2	2	-4	-4	-4	-4
$\chi_{22}^{(82)}$	10	10	10	10	2	2	2	2	-2	-2	-2	-2	-2	-2	-2	-2	-10	-10	-10	-10	2	2	2	2	-2	-2	-2	-2
$\chi_{22}^{(83)}$	10	10	10	10	2	2	2	2	-2	-2	-2	-2	-2	-2	-2	-2	-10	-10	-10	-10	2	2	2	2	4	4	4	4
$\chi_{22}^{(84)}$	10	10	10	10	2	2	2	2	-2	-2	-2	-2	-2	-2	-2	-2	-10	-10	-10	-10	2	2	2	2	2	2	2	2
$\chi_{22}^{(85)}$	10	10	-10	-10	-2	-2	2	2	-2	-2	2	2	-2	-2	2	2	10	10	-10	-10	-2	-2	2	2	-4	-4	4	4
$\chi_{22}^{(86)}$	10	10	-10	-10	-2	-2	2	2	-2	-2	2	2	-2	-2	2	2	10	10	-10	-10	-2	-2	2	2	-2	-2	2	2
$\chi_{22}^{(87)}$	10	10	-10	-10	-2	-2	2	2	-2	-2	2	2	-2	-2	2	2	10	10	-10	-10	-2	-2	2	2	4	4	-4	-4
$\chi_{22}^{(88)}$	10	10	-10	-10	-2	-2	2	2	-2	-2	2	2	-2	-2	2	2	10	10	-10	-10	-2	-2	2	2	2	2	2	-2
$\chi_{22}^{(89)}$	10	10	10	10	-6	-6	-6	-6	2	2	2	2	-6	-6	-6	-6	10	10	10	10	2	2	2	2	6	6	6	6
$\chi_{22}^{(90)}$	10	10	-10	-10	6	6	-6	-6	2	2	-2	-2	-6	-6	6	6	-10	-10	10	10	-2	-2	2	2	6	6	6	6

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$\chi_{22}^{(91)}$	10	10	10	10	-6	-6	-6	-6	2	2	2	6	6	6	6	-10	-10	-10	-10	-2	-2	-2	-2	.	.	.		
$\chi_{22}^{(92)}$	10	10	-10	-10	6	6	-6	-6	2	2	-2	-2	6	6	-6	-6	10	10	-10	-10	2	2	-2	-2	.	.	.	
$\chi_{22}^{(93)}$	10	-10	E	-E	D	-D	-6	6	-2	2	I	-I	6	-6	D	-D	E	-E	-10	10	-I	I	-2	2	.	.	.	
$\chi_{22}^{(94)}$	10	-10	-E	E	-D	D	-6	6	-2	2	-I	I	6	-6	-D	D	-E	E	-10	10	I	-I	-2	2	.	.	.	
$\chi_{22}^{(95)}$	10	-10	E	-E	D	-D	-6	6	-2	2	I	-I	-6	6	-D	D	-E	E	10	-10	I	-I	2	-2	.	.	.	
$\chi_{22}^{(96)}$	10	-10	-E	E	-D	D	-6	6	-2	2	-I	I	-6	6	D	-D	E	-E	10	-10	-I	I	2	-2	.	.	.	
$\chi_{22}^{(97)}$	10	-10	E	-E	I	-I	2	-2	2	-2	-I	I	-2	2	I	-I	E	-E	-10	10	I	-I	2	-2	-4	4	-B	
$\chi_{22}^{(98)}$	10	-10	-E	E	-I	I	2	-2	2	-2	I	-I	-2	2	-I	I	-E	E	-10	10	-I	I	2	-2	-4	4	B	
$\chi_{22}^{(99)}$	10	-10	E	-E	I	-I	2	-2	2	-2	-I	I	-2	2	I	-I	E	-E	-10	10	I	-I	2	-2	-2	2	I	
$\chi_{22}^{(100)}$	10	-10	-E	E	-I	I	2	-2	2	-2	I	-I	-2	2	-I	I	-E	E	-10	10	-I	I	2	-2	-2	2	-I	
$\chi_{22}^{(101)}$	10	-10	E	-E	I	-I	2	-2	2	-2	-I	I	-2	2	I	-I	E	-E	-10	10	I	-I	2	-2	4	-4	B	
$\chi_{22}^{(102)}$	10	-10	-E	E	-I	I	2	-2	2	-2	I	-I	-2	2	-I	I	-E	E	-10	10	-I	I	2	-2	4	-4	-B	
$\chi_{22}^{(103)}$	10	-10	E	-E	I	-I	2	-2	2	-2	-I	I	-2	2	I	-I	E	-E	-10	10	I	-I	2	-2	2	-2	-I	
$\chi_{22}^{(104)}$	10	-10	-E	E	-I	I	2	-2	2	-2	I	-I	-2	2	-I	I	-E	E	-10	10	-I	I	2	-2	2	-2	I	
$\chi_{22}^{(105)}$	10	-10	E	-E	I	-I	2	-2	2	-2	-I	I	2	-2	-I	I	-E	E	10	-10	-I	I	-2	2	-4	4	-B	
$\chi_{22}^{(106)}$	10	-10	-E	E	-I	I	2	-2	2	-2	I	-I	2	-2	I	-I	E	-E	10	-10	I	-I	-2	2	-4	4	B	
$\chi_{22}^{(107)}$	10	-10	E	-E	I	-I	2	-2	2	-2	-I	I	2	-2	-I	I	-E	E	10	-10	-I	I	-2	2	-2	2	I	
$\chi_{22}^{(108)}$	10	-10	-E	E	-I	I	2	-2	2	-2	I	-I	2	-2	I	-I	E	-E	10	-10	I	-I	-2	2	-2	2	-I	
$\chi_{22}^{(109)}$	10	-10	E	-E	I	-I	2	-2	2	-2	-I	I	2	-2	-I	I	-E	E	10	-10	-I	I	-2	2	4	-4	B	
$\chi_{22}^{(110)}$	10	-10	-E	E	-I	I	2	-2	2	-2	I	-I	2	-2	I	-I	E	-E	10	-10	I	-I	-2	2	4	-4	-B	
$\chi_{22}^{(111)}$	10	-10	E	-E	I	-I	2	-2	2	-2	-I	I	2	-2	-I	I	-E	E	10	-10	-I	I	-2	2	2	-2	-I	
$\chi_{22}^{(112)}$	10	-10	-E	E	-I	I	2	-2	2	-2	I	-I	2	-2	I	-I	E	-E	10	-10	I	-I	-2	2	2	-2	I	
$\chi_{22}^{(113)}$	15	15	15	15	-9	-9	-9	-9	3	3	3	3	-9	-9	-9	-9	15	15	15	15	3	3	3	3	-3	-3	-3	
$\chi_{22}^{(114)}$	15	15	15	15	-9	-9	-9	-9	3	3	3	3	-9	-9	-9	-9	15	15	15	15	3	3	3	3	3	3	3	
$\chi_{22}^{(115)}$	15	15	-15	-15	9	9	-9	-9	3	3	-3	-3	-9	-9	9	9	-15	-15	15	15	-3	-3	3	3	-3	-3	3	
$\chi_{22}^{(116)}$	15	15	-15	-15	9	9	-9	-9	3	3	-3	-3	-9	-9	9	9	-15	-15	15	15	-3	-3	3	3	3	3	-3	
$\chi_{22}^{(117)}$	15	15	15	15	-9	-9	-9	-9	3	3	3	3	9	9	9	9	-15	-15	-15	-15	-3	-3	-3	-3	-3	-3	-3	
$\chi_{22}^{(118)}$	15	15	15	15	-9	-9	-9	-9	3	3	3	3	9	9	9	9	-15	-15	-15	-15	-3	-3	-3	-3	3	3	3	
$\chi_{22}^{(119)}$	15	15	-15	-15	9	9	-9	-9	3	3	-3	-3	9	9	-9	-9	15	15	-15	-15	3	3	-3	-3	-3	-3	3	
$\chi_{22}^{(120)}$	15	15	-15	-15	9	9	-9	-9	3	3	-3	-3	9	9	-9	-9	15	15	-15	-15	3	3	-3	-3	3	3	-3	
$\chi_{22}^{(121)}$	15	-15	F	-F	J	-J	-9	9	-3	3	-H	H	9	-9	J	-J	F	-F	-15	15	H	-H	-3	3	-3	3	-H	
$\chi_{22}^{(122)}$	15	-15	-F	F	-J	J	-9	9	-3	3	H	-H	9	-9	-J	J	-F	F	-15	15	-H	H	-3	3	-3	3	H	
$\chi_{22}^{(123)}$	15	-15	F	-F	J	-J	-9	9	-3	3	-H	H	9	-9	J	-J	F	-F	-15	15	H	-H	-3	3	3	-3	H	
$\chi_{22}^{(124)}$	15	-15	-F	F	-J	J	-9	9	-3	3	H	-H	9	-9	-J	J	-F	F	-15	15	-H	H	-3	3	3	-3	-H	
$\chi_{22}^{(125)}$	15	-15	F	-F	J	-J	-9	9	-3	3	-H	H	-9	9	-J	J	-F	F	15	-15	-H	H	3	-3	-3	3	-H	
$\chi_{22}^{(126)}$	15	-15	-F	F	-J	J	-9	9	-3	3	H	-H	-9	9	J	-J	F	-F	15	-15	H	-H	3	-3	-3	3	H	
$\chi_{22}^{(127)}$	15	-15	F	-F	J	-J	-9	9	-3	3	-H	H	-9	9	-J	J	-F	F	15	-15	-H	H	3	-3	3	-3	H	
$\chi_{22}^{(128)}$	15	-15	-F	F	-J	J	-9	9	-3	3	H	-H	-9	9	J	-J	F	-F	15	-15	H	-H	3	-3	3	-3	-H	
$\chi_{22}^{(129)}$	20	20	20	20	4	4	4	4	-4	-4	-4	-4	4	4	4	4	20	20	20	20	-4	-4	-4	-4	-2	-2	-2	
$\chi_{22}^{(130)}$	20	20	20	20	4	4	4	4	-4	-4	-4	-4	4	4	4	4	20	20	20	20	-4	-4	-4	-4	2	2	2	
$\chi_{22}^{(131)}$	20	20	-20	-20	-4	-4	4	4	-4	-4	4	4	4	4	-4	-4	-20	-20	20	20	4	4	-4	-4	-2	-2	2	
$\chi_{22}^{(132)}$	20	20	-20	-20	-4	-4	4	4	-4	-4	4	4	4	4	-4	-4	-20	-20	20	20	4	4	-4	-4	2	2	-2	
$\chi_{22}^{(133)}$	20	20	20	20	4	4	4	4	-4	-4	-4	-4	-4	-4	-4	-4	-20	-20	-20	-20	4	4	4	4	-2	-2	-2	
$\chi_{22}^{(134)}$	20	20	20	20	4	4	4	4	-4	-4	-4	-4	-4	-4	-4	-4	-20	-20	-20	-20	4	4	4	4	2	2	2	
$\chi_{22}^{(135)}$	20	20	-20	-20	-4	-4	4	4	-4	-4	4	4	-4	-4	4	4	20	20	-20	-20	-4	-4	4	4	-2	-2	2	

$\chi_{22}^{(36)}$	-1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	1	1
$\chi_{22}^{(37)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{22}^{(38)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
$\chi_{22}^{(39)}$	1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	1	1
$\chi_{22}^{(40)}$	-1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	-1	-1
$\chi_{22}^{(41)}$	3	-3	-3	-3	-3	-1	-1	-1	-1	1	1	1	1	-3	-3	-3	-3	3	3	3	3	1	1	1	1	-1	-1
$\chi_{22}^{(42)}$	-3	3	3	3	3	1	1	1	1	-1	-1	-1	-1	3	3	3	3	-3	-3	-3	-3	-1	-1	-1	-1	1	1
$\chi_{22}^{(43)}$	-3	3	3	-3	-3	1	1	-1	-1	1	1	-1	-1	-3	-3	3	3	-3	-3	3	3	-1	-1	1	1	-1	-1
$\chi_{22}^{(44)}$	3	-3	-3	3	3	-1	-1	1	1	-1	-1	1	1	3	3	-3	-3	3	3	-3	-3	1	1	-1	-1	1	1
$\chi_{22}^{(45)}$	3	-3	-3	-3	-3	-1	-1	-1	-1	1	1	1	1	3	3	3	3	-3	-3	-3	-3	-1	-1	-1	-1	1	1
$\chi_{22}^{(46)}$	-3	3	3	3	3	1	1	1	1	-1	-1	-1	-1	-3	-3	-3	-3	3	3	3	3	1	1	1	1	-1	-1
$\chi_{22}^{(47)}$	-3	3	3	-3	-3	1	1	-1	-1	1	1	-1	-1	3	3	-3	-3	3	3	-3	-3	1	1	-1	-1	1	1
$\chi_{22}^{(48)}$	3	-3	-3	3	3	-1	-1	1	1	-1	-1	1	1	-3	-3	3	3	-3	-3	3	3	-1	-1	1	1	-1	-1
$\chi_{22}^{(49)}$	A	A	-A	-1	1	A	-A	-1	1	1	-1	A	-A	1	-1	A	-A	-A	A	1	-1	-A	A	1	-1	-1	1
$\chi_{22}^{(50)}$	-A	-A	A	-1	1	-A	A	-1	1	1	-1	-A	A	1	-1	-A	A	A	-A	1	-1	A	-A	1	-1	-1	1
$\chi_{22}^{(51)}$	-A	-A	A	1	-1	-A	A	1	-1	-1	1	-A	A	-1	1	-A	A	A	-A	-1	1	A	-A	-1	1	1	-1
$\chi_{22}^{(52)}$	A	A	-A	1	-1	A	-A	1	-1	-1	1	A	-A	-1	1	A	-A	-A	A	-1	1	-A	A	-1	1	1	-1
$\chi_{22}^{(53)}$	A	A	-A	-1	1	A	-A	-1	1	1	-1	A	-A	-1	1	-A	A	A	-A	-1	1	A	-A	-1	1	1	-1
$\chi_{22}^{(54)}$	-A	-A	A	-1	1	-A	A	-1	1	1	-1	-A	A	-1	1	A	-A	-A	A	-1	1	-A	A	-1	1	1	-1
$\chi_{22}^{(55)}$	-A	-A	A	1	-1	-A	A	1	-1	-1	1	-A	A	1	-1	A	-A	-A	A	1	-1	-A	A	1	-1	-1	1
$\chi_{22}^{(56)}$	A	A	-A	1	-1	A	-A	1	-1	-1	1	A	-A	1	-1	-A	A	A	-A	1	-1	A	-A	1	-1	-1	1
$\chi_{22}^{(57)}$	-H	H	-H	-3	3	A	-A	-1	1	-1	1	-A	A	3	-3	H	-H	H	-H	-3	3	A	-A	-1	1	-1	1
$\chi_{22}^{(58)}$	H	-H	H	-3	3	-A	A	-1	1	-1	1	A	-A	3	-3	-H	H	-H	H	-3	3	-A	A	-1	1	-1	1
$\chi_{22}^{(59)}$	H	-H	H	3	-3	-A	A	1	-1	1	-1	A	-A	-3	3	-H	H	-H	H	3	-3	-A	A	1	-1	1	-1
$\chi_{22}^{(60)}$	-H	H	-H	3	-3	A	-A	1	-1	1	-1	-A	A	-3	3	H	-H	H	-H	3	-3	A	-A	1	-1	1	-1
$\chi_{22}^{(61)}$	-H	H	-H	-3	3	A	-A	-1	1	-1	1	-A	A	-3	3	-H	H	-H	H	3	-3	-A	A	1	-1	1	-1
$\chi_{22}^{(62)}$	H	-H	H	-3	3	-A	A	-1	1	-1	1	A	-A	-3	3	H	-H	H	-H	3	-3	A	-A	1	-1	1	-1
$\chi_{22}^{(63)}$	H	-H	H	3	-3	-A	A	1	-1	1	-1	A	-A	3	-3	H	-H	H	-H	-3	3	A	-A	-1	1	-1	1
$\chi_{22}^{(64)}$	-H	H	-H	3	-3	A	-A	1	-1	1	-1	-A	A	3	-3	-H	H	-H	H	-3	3	-A	A	-1	1	-1	1
$\chi_{22}^{(65)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(66)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(67)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(68)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(69)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(70)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(71)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(72)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(73)}$	-4	-2	-2	-2	-2	.	.	.	.	2	2	2	2	-2	-2	-2	-2	-4	-4	-4	-4	2	2	2	2	.	.
$\chi_{22}^{(74)}$	-2	-4	-4	-4	-4	2	2	2	2	.	.	.	.	-4	-4	-4	-4	-2	-2	-2	-2	.	.	.	.	2	2
$\chi_{22}^{(75)}$	4	2	2	2	2	.	.	.	.	-2	-2	-2	-2	2	2	2	2	4	4	4	4	-2	-2	-2	-2	.	.
$\chi_{22}^{(76)}$	2	4	4	4	4	-2	-2	-2	-2	.	.	.	.	4	4	4	4	2	2	2	2	.	.	.	.	-2	-2
$\chi_{22}^{(77)}$	4	2	2	-2	-2	.	.	.	.	2	2	-2	-2	-2	-2	2	2	4	4	-4	-4	-2	-2	2	2	.	.
$\chi_{22}^{(78)}$	2	4	4	-4	-4	-2	-2	2	2	.	.	.	.	-4	-4	4	4	2	2	-2	-2	.	.	.	.	2	2
$\chi_{22}^{(79)}$	-4	-2	-2	2	2	.	.	.	.	-2	-2	2	2	2	2	-2	-2	-4	-4	4	4	2	2	-2	-2	.	.
$\chi_{22}^{(80)}$	-2	-4	-4	4	4	2	2	-2	-2	.	.	.	.	4	4	-4	-4	-2	-2	2	2	.	.	.	.	-2	-2

$\chi_{22}^{(81)}$	-4	-2	-2	-2	-2	2	2	2	2	2	2	2	2	2	2	2	4	4	4	4	-2	-2	-2	-2	.	.
$\chi_{22}^{(82)}$	-2	-4	-4	-4	-4	2	2	2	2	.	.	.	.	4	4	4	4	2	2	2	2	.	.	.	.	-2	-2	.	.
$\chi_{22}^{(83)}$	4	2	2	2	2	.	.	.	.	-2	-2	-2	-2	-2	-2	-2	-4	-4	-4	-4	2	2	2	2	2	2	2	.	.
$\chi_{22}^{(84)}$	2	4	4	4	4	-2	-2	-2	-2	.	.	.	.	-4	-4	-4	-4	-2	-2	-2	-2	.	.	.	.	2	2	.	.
$\chi_{22}^{(85)}$	4	2	2	-2	-2	.	.	.	.	2	2	-2	-2	2	2	-2	-2	-4	-4	4	4	2	2	-2	-2	.	.	.	.
$\chi_{22}^{(86)}$	2	4	4	-4	-4	-2	-2	2	2	.	.	.	.	4	4	-4	-4	-2	-2	2	2	.	.	.	.	-2	-2	.	.
$\chi_{22}^{(87)}$	-4	-2	-2	2	2	.	.	.	.	-2	-2	2	2	-2	-2	2	2	4	4	-4	-4	-2	-2	2	2	.	.	.	.
$\chi_{22}^{(88)}$	-2	-4	-4	4	4	2	2	-2	-2	.	.	.	.	-4	-4	4	4	2	2	-2	-2	.	.	.	.	2	2	.	.
$\chi_{22}^{(89)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(90)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(91)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(92)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(93)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(94)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(95)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(96)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(97)}$	B	-I	I	-2	2	.	.	.	.	-2	2	I	-I	2	-2	-I	I	-B	B	4	-4	-I	I	-2	2	.	.	.	.
$\chi_{22}^{(98)}$	-B	I	-I	-2	2	.	.	.	.	-2	2	-I	I	2	-2	I	-I	B	-B	4	-4	I	-I	-2	2	.	.	.	.
$\chi_{22}^{(99)}$	-I	B	-B	-4	4	I	-I	2	-2	.	.	.	.	4	-4	B	-B	I	-I	2	-2	.	.	.	.	2	-2	.	.
$\chi_{22}^{(100)}$	I	-B	B	-4	4	-I	I	2	-2	.	.	.	.	4	-4	-B	B	-I	I	2	-2	.	.	.	.	2	-2	.	.
$\chi_{22}^{(101)}$	-B	I	-I	2	-2	.	.	.	.	2	-2	-I	I	-2	2	I	-I	B	-B	-4	4	I	-I	2	-2	.	.	.	.
$\chi_{22}^{(102)}$	B	-I	I	2	-2	.	.	.	.	2	-2	I	-I	-2	2	-I	I	-B	B	-4	4	-I	I	2	-2	.	.	.	.
$\chi_{22}^{(103)}$	I	-B	B	4	-4	-I	I	-2	2	.	.	.	.	-4	4	-B	B	-I	I	-2	2	.	.	.	.	-2	2	.	.
$\chi_{22}^{(104)}$	-I	B	-B	4	-4	I	-I	-2	2	.	.	.	.	-4	4	B	-B	I	-I	-2	2	.	.	.	.	-2	2	.	.
$\chi_{22}^{(105)}$	B	-I	I	-2	2	.	.	.	.	-2	2	I	-I	-2	2	I	-I	B	-B	-4	4	I	-I	2	-2	.	.	.	.
$\chi_{22}^{(106)}$	-B	I	-I	-2	2	.	.	.	.	-2	2	-I	I	-2	2	-I	I	-B	B	-4	4	-I	I	2	-2	.	.	.	.
$\chi_{22}^{(107)}$	-I	B	-B	-4	4	I	-I	2	-2	.	.	.	.	-4	4	-B	B	-I	I	-2	2	.	.	.	.	-2	2	.	.
$\chi_{22}^{(108)}$	I	-B	B	-4	4	-I	I	2	-2	.	.	.	.	-4	4	B	-B	I	-I	-2	2	.	.	.	.	-2	2	.	.
$\chi_{22}^{(109)}$	-B	I	-I	2	-2	.	.	.	.	2	-2	-I	I	2	-2	-I	I	-B	B	4	-4	-I	I	-2	2	.	.	.	.
$\chi_{22}^{(110)}$	B	-I	I	2	-2	.	.	.	.	2	-2	I	-I	2	-2	I	-I	B	-B	4	-4	I	-I	-2	2	.	.	.	.
$\chi_{22}^{(111)}$	I	-B	B	4	-4	-I	I	-2	2	.	.	.	.	4	-4	B	-B	I	-I	2	-2	.	.	.	.	2	-2	.	.
$\chi_{22}^{(112)}$	-I	B	-B	4	-4	I	-I	-2	2	.	.	.	.	4	-4	-B	B	-I	I	2	-2	.	.	.	.	2	-2	.	.
$\chi_{22}^{(113)}$	-3	3	3	3	3	1	1	1	1	-1	-1	-1	-1	3	3	3	3	-3	-3	-3	-3	-1	-1	-1	-1	1	1	.	.	
$\chi_{22}^{(114)}$	3	-3	-3	-3	-3	-1	-1	-1	-1	1	1	1	1	-3	-3	-3	-3	3	3	3	3	1	1	1	1	-1	-1	.	.	
$\chi_{22}^{(115)}$	3	-3	-3	3	3	-1	-1	1	1	-1	-1	1	1	3	3	-3	-3	3	3	-3	-3	1	1	-1	-1	1	1	.	.	
$\chi_{22}^{(116)}$	-3	3	3	-3	-3	1	1	-1	-1	1	1	-1	-1	-3	-3	3	3	-3	-3	3	3	-1	-1	1	1	-1	-1	.	.	
$\chi_{22}^{(117)}$	-3	3	3	3	3	1	1	1	1	-1	-1	-1	-1	-3	-3	-3	-3	3	3	3	3	1	1	1	1	-1	-1	.	.	
$\chi_{22}^{(118)}$	3	-3	-3	-3	-3	-1	-1	-1	-1	1	1	1	1	3	3	3	3	-3	-3	-3	-3	-1	-1	-1	-1	1	1	.	.	
$\chi_{22}^{(119)}$	3	-3	-3	3	3	-1	-1	1	1	-1	-1	1	1	-3	-3	3	3	-3	-3	3	3	-1	-1	1	1	-1	-1	.	.	
$\chi_{22}^{(120)}$	-3	3	3	-3	-3	1	1	-1	-1	1	1	-1	-1	3	3	-3	-3	3	3	-3	-3	1	1	-1	-1	1	1	.	.	
$\chi_{22}^{(121)}$	H	-H	H	3	-3	-A	A	1	-1	1	-1	A	-A	-3	3	-H	H	-H	H	3	-3	-A	A	1	-1	1	-1	.	.	
$\chi_{22}^{(122)}$	-H	H	-H	3	-3	A	-A	1	-1	1	-1	-A	A	-3	3	H	-H	H	-H	3	-3	A	-A	1	-1	1	-1	.	.	
$\chi_{22}^{(123)}$	-H	H	-H	-3	3	A	-A	-1	1	-1	1	-A	A	3	-3	H	-H	H	-H	-3	3	A	-A	-1	1	-1	1	.	.	
$\chi_{22}^{(124)}$	H	-H	H	-3	3	-A	A	-1	1	-1	1	A	-A	3	-3	-H	H	-H	H	-3	3	-A	A	-1	1	-1	1	.	.	
$\chi_{22}^{(125)}$	H	-H	H	3	-3	-A	A	1	-1	1	-1	A	-A	3	-3	H	-H	H	-H	-3	3	A	-A	-1	1	-1	1	.	.	

$\chi_{22}^{(126)}$	-H	H	-H	3	-3	A	-A	1	-1	1	-1	-A	A	3	-3	-H	H	-H	H	-3	3	-A	A	-1	1	-1	1											
$\chi_{22}^{(127)}$	-H	H	-H	-3	3	A	-A	-1	1	-1	1	-A	A	-3	3	-H	H	-H	H	3	-3	-A	A	1	-1	1	-1											
$\chi_{22}^{(128)}$	H	-H	H	-3	3	-A	A	-1	1	-1	1	A	-A	-3	3	H	-H	H	-H	3	-3	A	-A	1	-1	1	-1											
$\chi_{22}^{(129)}$	-2	2	2	2	2	-2	-2	-2	-2	2	2	2	2	2	2	2	-2	-2	-2	-2	2	2	2	2	-2	-2												
$\chi_{22}^{(130)}$	2	-2	-2	-2	-2	2	2	2	2	-2	-2	-2	-2	-2	-2	-2	2	2	2	2	-2	-2	-2	-2	2	2												
$\chi_{22}^{(131)}$	2	-2	-2	2	2	2	2	-2	-2	2	2	-2	-2	2	2	-2	-2	2	2	-2	-2	-2	-2	2	2	-2	-2											
$\chi_{22}^{(132)}$	-2	2	2	-2	-2	-2	-2	2	2	-2	-2	2	2	-2	-2	2	2	-2	-2	2	2	2	2	-2	-2	2	2											
$\chi_{22}^{(133)}$	-2	2	2	2	2	-2	-2	-2	-2	2	2	2	2	-2	-2	-2	-2	2	2	2	2	-2	-2	-2	-2	2	2											
$\chi_{22}^{(134)}$	2	-2	-2	-2	-2	2	2	2	2	-2	-2	-2	-2	2	2	2	2	-2	-2	-2	-2	2	2	2	2	-2	-2											
$\chi_{22}^{(135)}$	2	-2	-2	2	2	2	2	-2	-2	2	2	-2	-2	-2	-2	2	2	-2	-2	2	2	2	2	-2	-2	2	2											
$\chi_{22}^{(136)}$	-2	2	2	-2	-2	-2	-2	2	2	-2	-2	2	2	2	2	-2	-2	2	2	-2	-2	-2	-2	2	2	-2	-2											
$\chi_{22}^{(137)}$	-I	I	-I	2	-2	-I	I	-2	2	-2	2	I	-I	-2	2	I	-I	I	-I	2	-2	-I	I	-2	2	-2	2											
$\chi_{22}^{(138)}$	I	-I	I	2	-2	I	-I	-2	2	-2	2	-I	I	-2	2	-I	I	-I	I	2	-2	I	-I	-2	2	-2	2											
$\chi_{22}^{(139)}$	I	-I	I	-2	2	I	-I	2	-2	2	-2	-I	I	2	-2	-I	I	-I	I	-2	2	I	-I	2	-2	2	-2											
$\chi_{22}^{(140)}$	-I	I	-I	-2	2	-I	I	2	-2	2	-2	I	-I	2	-2	I	-I	I	-I	-2	2	-I	I	2	-2	2	-2											
$\chi_{22}^{(141)}$	-I	I	-I	2	-2	-I	I	-2	2	-2	2	I	-I	2	-2	-I	I	-I	I	-2	2	I	-I	2	-2	2	-2											
$\chi_{22}^{(142)}$	I	-I	I	2	-2	I	-I	-2	2	-2	2	-I	I	2	-2	I	-I	I	-I	-2	2	-I	I	2	-2	2	-2											
$\chi_{22}^{(143)}$	I	-I	I	-2	2	I	-I	2	-2	2	-2	-I	I	-2	2	I	-I	I	-I	2	-2	-I	I	-2	2	-2	2											
$\chi_{22}^{(144)}$	-I	I	-I	-2	2	-I	I	2	-2	2	-2	I	-I	-2	2	-I	I	-I	I	2	-2	I	-I	-2	2	-2	2											
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$\chi_{22}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1												
$\chi_{22}^{(2)}$	-1	-1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	1	1	-1													
$\chi_{22}^{(3)}$	1	1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	1	1	-1													
$\chi_{22}^{(4)}$	1	1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	-1	-1	1													
$\chi_{22}^{(5)}$	-1	-1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	-1	-1	1													
$\chi_{22}^{(6)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1													
$\chi_{22}^{(7)}$	-1	-1	1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1													
$\chi_{22}^{(8)}$	-1	-1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1													
$\chi_{22}^{(9)}$	-A	A	1	-1	A	-A	-A	A	1	-1	-A	A	1	-1	-1	1	-A	A	A	-A	-1	1	A	-A	-1													
$\chi_{22}^{(10)}$	A	-A	1	-1	-A	A	A	-A	1	-1	A	-A	1	-1	-1	1	A	-A	-A	A	-1	1	-A	A	-1													
$\chi_{22}^{(11)}$	A	-A	1	-1	A	-A	-A	A	1	-1	-A	A	1	-1	-1	1	-A	A	A	-A	-1	1	A	-A	-1													
$\chi_{22}^{(12)}$	-A	A	1	-1	-A	A	A	-A	1	-1	A	-A	1	-1	-1	1	A	-A	-A	A	-1	1	-A	A	-1													
$\chi_{22}^{(13)}$	A	-A	1	-1	A	-A	-A	A	1	-1	-A	A	1	-1	1	-1	A	-A	-A	A	1	-1	-A	A	1													
$\chi_{22}^{(14)}$	-A	A	1	-1	-A	A	A	-A	1	-1	A	-A	1	-1	1	-1	-A	A	A	-A	1	-1	A	-A	1													
$\chi_{22}^{(15)}$	-A	A	1	-1	A	-A	-A	A	1	-1	-A	A	1	-1	1	-1	A	-A	-A	A	1	-1	-A	A	1													
$\chi_{22}^{(16)}$	A	-A	1	-1	-A	A	A	-A	1	-1	A	-A	1	-1	1	-1	-A	A	A	-A	1	-1	A	-A	1													
$\chi_{22}^{(17)}$	-2	-2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1													
$\chi_{22}^{(18)}$	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1													
$\chi_{22}^{(19)}$	2	2	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	-1	-1	1													
$\chi_{22}^{(20)}$	-2	-2	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	-1	-1	1													
$\chi_{22}^{(21)}$	2	2	1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1													
$\chi_{22}^{(22)}$	-2	-2	1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1													
$\chi_{22}^{(23)}$	-2	-2	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	1	1	-1													
$\chi_{22}^{(24)}$	2	2	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	1	1	-1													
$\chi_{22}^{(25)}$	I	-I	1	-1	A	-A	-A	A	1	-1	-A	A	1	-1	-1	1	-A	A	A	-A	-1	1	A	-A	-1													

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$\chi_{22}^{(26)}$	-I	I	1	-1	-A	A	A	-A	1	-1	A	-A	1	-1	-1	1	A	-A	-A	A	-1	1	-A	A	-1
$\chi_{22}^{(27)}$	-I	I	1	-1	A	-A	-A	A	1	-1	-A	A	1	-1	-1	1	-A	A	A	-A	-1	1	A	-A	-1
$\chi_{22}^{(28)}$	I	-I	1	-1	-A	A	A	-A	1	-1	A	-A	1	-1	-1	1	A	-A	-A	A	-1	1	-A	A	-1
$\chi_{22}^{(29)}$	-I	I	1	-1	A	-A	-A	A	1	-1	-A	A	1	-1	1	-1	A	-A	-A	A	1	-1	-A	A	1
$\chi_{22}^{(30)}$	I	-I	1	-1	-A	A	A	-A	1	-1	A	-A	1	-1	1	-1	-A	A	A	-A	1	-1	A	-A	1
$\chi_{22}^{(31)}$	I	-I	1	-1	A	-A	-A	A	1	-1	-A	A	1	-1	1	-1	A	-A	-A	A	1	-1	-A	A	1
$\chi_{22}^{(32)}$	-I	I	1	-1	-A	A	A	-A	1	-1	A	-A	1	-1	1	-1	-A	A	A	-A	1	-1	A	-A	1
$\chi_{22}^{(33)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_{22}^{(34)}$	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_{22}^{(35)}$	1	1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	1	1	-1
$\chi_{22}^{(36)}$	-1	-1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	1	1	-1
$\chi_{22}^{(37)}$	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{22}^{(38)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{22}^{(39)}$	-1	-1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	-1	-1	1
$\chi_{22}^{(40)}$	1	1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	-1	-1	1
$\chi_{22}^{(41)}$	-1	-1	2	2	2	2	-2	-2	-2	-2	.	.	.	.	-2	-2	-2	-2	2	2	2	2	.	.	.
$\chi_{22}^{(42)}$	1	1	2	2	2	2	-2	-2	-2	-2	.	.	.	.	-2	-2	-2	-2	2	2	2	2	.	.	.
$\chi_{22}^{(43)}$	1	1	2	2	-2	-2	2	2	-2	-2	.	.	.	.	-2	-2	2	2	-2	-2	2	2	.	.	.
$\chi_{22}^{(44)}$	-1	-1	2	2	-2	-2	2	2	-2	-2	.	.	.	.	-2	-2	2	2	-2	-2	2	2	.	.	.
$\chi_{22}^{(45)}$	1	1	2	2	2	2	-2	-2	-2	-2	.	.	.	.	2	2	2	2	-2	-2	-2	-2	.	.	.
$\chi_{22}^{(46)}$	-1	-1	2	2	2	2	-2	-2	-2	-2	.	.	.	.	2	2	2	2	-2	-2	-2	-2	.	.	.
$\chi_{22}^{(47)}$	-1	-1	2	2	-2	-2	2	2	-2	-2	.	.	.	.	2	2	-2	-2	2	2	-2	-2	.	.	.
$\chi_{22}^{(48)}$	1	1	2	2	-2	-2	2	2	-2	-2	.	.	.	.	2	2	-2	-2	2	2	-2	-2	.	.	.
$\chi_{22}^{(49)}$	-A	A	-1	1	-A	A	A	-A	-1	1	A	-A	-1	1	1	-1	A	-A	-A	A	1	-1	-A	A	1
$\chi_{22}^{(50)}$	A	-A	-1	1	A	-A	-A	A	-1	1	-A	A	-1	1	1	-1	-A	A	A	-A	1	-1	A	-A	1
$\chi_{22}^{(51)}$	A	-A	-1	1	-A	A	A	-A	-1	1	A	-A	-1	1	1	-1	A	-A	-A	A	1	-1	-A	A	1
$\chi_{22}^{(52)}$	-A	A	-1	1	A	-A	-A	A	-1	1	-A	A	-1	1	1	-1	-A	A	A	-A	1	-1	A	-A	1
$\chi_{22}^{(53)}$	A	-A	-1	1	-A	A	A	-A	-1	1	A	-A	-1	1	-1	1	-A	A	A	-A	-1	1	A	-A	-1
$\chi_{22}^{(54)}$	-A	A	-1	1	A	-A	-A	A	-1	1	-A	A	-1	1	-1	1	A	-A	-A	A	-1	1	-A	A	-1
$\chi_{22}^{(55)}$	-A	A	-1	1	-A	A	A	-A	-1	1	A	-A	-1	1	-1	1	-A	A	A	-A	-1	1	A	-A	-1
$\chi_{22}^{(56)}$	A	-A	-1	1	A	-A	-A	A	-1	1	-A	A	-1	1	-1	1	A	-A	-A	A	-1	1	-A	A	-1
$\chi_{22}^{(57)}$	-A	A	2	-2	-I	I	-I	I	-2	2	.	.	.	.	2	-2	-I	I	-I	I	-2	2	.	.	.
$\chi_{22}^{(58)}$	A	-A	2	-2	I	-I	I	-I	-2	2	.	.	.	.	2	-2	I	-I	I	-I	-2	2	.	.	.
$\chi_{22}^{(59)}$	A	-A	2	-2	-I	I	-I	I	-2	2	.	.	.	.	2	-2	-I	I	-I	I	-2	2	.	.	.
$\chi_{22}^{(60)}$	-A	A	2	-2	I	-I	I	-I	-2	2	.	.	.	.	2	-2	I	-I	I	-I	-2	2	.	.	.
$\chi_{22}^{(61)}$	A	-A	2	-2	-I	I	-I	I	-2	2	.	.	.	.	-2	2	I	-I	I	-I	2	-2	.	.	.
$\chi_{22}^{(62)}$	-A	A	2	-2	I	-I	I	-I	-2	2	.	.	.	.	-2	2	-I	I	-I	I	2	-2	.	.	.
$\chi_{22}^{(63)}$	-A	A	2	-2	-I	I	-I	I	-2	2	-2	2	I	-I	I	-I	2	-2	.	.	.
$\chi_{22}^{(64)}$	A	-A	2	-2	I	-I	I	-I	-2	2	-2	2	-I	I	-I	I	2	-2	.	.	.
$\chi_{22}^{(65)}$
$\chi_{22}^{(66)}$
$\chi_{22}^{(67)}$
$\chi_{22}^{(68)}$
$\chi_{22}^{(69)}$
$\chi_{22}^{(70)}$

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$\chi_{22}^{(71)}$
$\chi_{22}^{(72)}$
$\chi_{22}^{(73)}$.	.	1	1	1	1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	-1	-1	-1
$\chi_{22}^{(74)}$	2	2	1	1	1	1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	-1	-1	-1
$\chi_{22}^{(75)}$	.	.	1	1	1	1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	-1	-1	-1
$\chi_{22}^{(76)}$	-2	-2	1	1	1	1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	-1	-1	-1
$\chi_{22}^{(77)}$	.	.	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	1	1	-1
$\chi_{22}^{(78)}$	-2	-2	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	1	1	-1
$\chi_{22}^{(79)}$	.	.	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	1	1	-1
$\chi_{22}^{(80)}$	2	2	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	1	1	-1
$\chi_{22}^{(81)}$	.	.	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1
$\chi_{22}^{(82)}$	-2	-2	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1
$\chi_{22}^{(83)}$	.	.	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1
$\chi_{22}^{(84)}$	2	2	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1
$\chi_{22}^{(85)}$	.	.	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1
$\chi_{22}^{(86)}$	2	2	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1
$\chi_{22}^{(87)}$	.	.	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1
$\chi_{22}^{(88)}$	-2	-2	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1
$\chi_{22}^{(89)}$	.	.	-2	-2	-2	-2	2	2	2	2	.	.	.	.	2	2	2	2	-2	-2	-2	-2	.	.	.
$\chi_{22}^{(90)}$	.	.	-2	-2	2	2	-2	-2	2	2	.	.	.	.	2	2	-2	-2	2	2	-2	-2	.	.	.
$\chi_{22}^{(91)}$	.	.	-2	-2	-2	-2	2	2	2	2	.	.	.	.	-2	-2	-2	-2	2	2	2	2	.	.	.
$\chi_{22}^{(92)}$	.	.	-2	-2	2	2	-2	-2	2	2	.	.	.	.	-2	-2	2	2	-2	-2	2	2	.	.	.
$\chi_{22}^{(93)}$	.	.	-2	2	I	-I	I	-I	2	-2	.	.	.	.	-2	2	I	-I	I	-I	2	-2	.	.	.
$\chi_{22}^{(94)}$	.	.	-2	2	-I	I	-I	I	2	-2	.	.	.	.	-2	2	-I	I	-I	I	2	-2	.	.	.
$\chi_{22}^{(95)}$	.	.	-2	2	I	-I	I	-I	2	-2	.	.	.	.	2	-2	-I	I	-I	I	-2	2	.	.	.
$\chi_{22}^{(96)}$	.	.	-2	2	-I	I	-I	I	2	-2	.	.	.	.	2	-2	I	-I	I	-I	-2	2	.	.	.
$\chi_{22}^{(97)}$	.	.	1	-1	A	-A	-A	A	1	-1	A	-A	-1	1	-1	1	-A	A	A	-A	-1	1	-A	A	1
$\chi_{22}^{(98)}$	.	.	1	-1	-A	A	A	-A	1	-1	-A	A	-1	1	-1	1	A	-A	-A	A	-1	1	A	-A	1
$\chi_{22}^{(99)}$	-I	I	1	-1	A	-A	-A	A	1	-1	A	-A	-1	1	-1	1	-A	A	A	-A	-1	1	-A	A	1
$\chi_{22}^{(100)}$	I	-I	1	-1	-A	A	A	-A	1	-1	-A	A	-1	1	-1	1	A	-A	-A	A	-1	1	A	-A	1
$\chi_{22}^{(101)}$	.	.	1	-1	A	-A	-A	A	1	-1	A	-A	-1	1	-1	1	-A	A	A	-A	-1	1	-A	A	1
$\chi_{22}^{(102)}$	.	.	1	-1	-A	A	A	-A	1	-1	-A	A	-1	1	-1	1	A	-A	-A	A	-1	1	A	-A	1
$\chi_{22}^{(103)}$	I	-I	1	-1	A	-A	-A	A	1	-1	A	-A	-1	1	-1	1	-A	A	A	-A	-1	1	-A	A	1
$\chi_{22}^{(104)}$	-I	I	1	-1	-A	A	A	-A	1	-1	-A	A	-1	1	-1	1	A	-A	-A	A	-1	1	A	-A	1
$\chi_{22}^{(105)}$	.	.	1	-1	A	-A	-A	A	1	-1	A	-A	-1	1	1	-1	A	-A	-A	A	1	-1	A	-A	-1
$\chi_{22}^{(106)}$	.	.	1	-1	-A	A	A	-A	1	-1	-A	A	-1	1	1	-1	-A	A	A	-A	1	-1	-A	A	-1
$\chi_{22}^{(107)}$	I	-I	1	-1	A	-A	-A	A	1	-1	A	-A	-1	1	1	-1	A	-A	-A	A	1	-1	A	-A	-1
$\chi_{22}^{(108)}$	-I	I	1	-1	-A	A	A	-A	1	-1	-A	A	-1	1	1	-1	-A	A	A	-A	1	-1	-A	A	-1
$\chi_{22}^{(109)}$	.	.	1	-1	A	-A	-A	A	1	-1	A	-A	-1	1	1	-1	A	-A	-A	A	1	-1	A	-A	-1
$\chi_{22}^{(110)}$	.	.	1	-1	-A	A	A	-A	1	-1	-A	A	-1	1	1	-1	-A	A	A	-A	1	-1	-A	A	-1
$\chi_{22}^{(111)}$	-I	I	1	-1	A	-A	-A	A	1	-1	A	-A	-1	1	1	-1	A	-A	-A	A	1	-1	A	-A	-1
$\chi_{22}^{(112)}$	I	-I	1	-1	-A	A	A	-A	1	-1	-A	A	-1	1	1	-1	-A	A	A	-A	1	-1	-A	A	-1
$\chi_{22}^{(113)}$	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(114)}$	-1	-1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(115)}$	-1	-1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

	60												70											
$\chi_{22}^{(116)}$	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(117)}$	-1	-1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(118)}$	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(119)}$	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(120)}$	-1	-1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(121)}$	A	-A	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(122)}$	-A	A	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(123)}$	-A	A	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(124)}$	A	-A	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(125)}$	-A	A	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(126)}$	A	-A	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(127)}$	A	-A	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(128)}$	-A	A	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(129)}$	-2	-2	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	1	1	1
$\chi_{22}^{(130)}$	2	2	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	1	1	1
$\chi_{22}^{(131)}$	2	2	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	-1	-1
$\chi_{22}^{(132)}$	-2	-2	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	-1	-1
$\chi_{22}^{(133)}$	2	2	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1
$\chi_{22}^{(134)}$	-2	-2	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1
$\chi_{22}^{(135)}$	-2	-2	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	-1
$\chi_{22}^{(136)}$	2	2	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	-1
$\chi_{22}^{(137)}$	I	-I	-1	1	-A	A	A	-A	-1	1	-A	A	1	-1	1	-1	A	-A	-A	A	1	-1	A	-A
$\chi_{22}^{(138)}$	-I	I	-1	1	A	-A	-A	A	-1	1	A	-A	1	-1	1	-1	-A	A	A	-A	1	-1	-A	A
$\chi_{22}^{(139)}$	-I	I	-1	1	-A	A	A	-A	-1	1	-A	A	1	-1	1	-1	A	-A	-A	A	1	-1	A	-A
$\chi_{22}^{(140)}$	I	-I	-1	1	A	-A	-A	A	-1	1	A	-A	1	-1	1	-1	-A	A	A	-A	1	-1	-A	A
$\chi_{22}^{(141)}$	-I	I	-1	1	-A	A	A	-A	-1	1	-A	A	1	-1	-1	1	-A	A	A	-A	-1	1	-A	A
$\chi_{22}^{(142)}$	I	-I	-1	1	A	-A	-A	A	-1	1	A	-A	1	-1	-1	1	A	-A	-A	A	-1	1	A	-A
$\chi_{22}^{(143)}$	I	-I	-1	1	-A	A	A	-A	-1	1	-A	A	1	-1	-1	1	-A	A	A	-A	-1	1	-A	A
$\chi_{22}^{(144)}$	-I	I	-1	1	A	-A	-A	A	-1	1	A	-A	1	-1	-1	1	A	-A	-A	A	-1	1	A	-A
	80				90												100							
$\chi_{22}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
$\chi_{22}^{(2)}$	-1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	1	1	
$\chi_{22}^{(3)}$	-1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	1	1	
$\chi_{22}^{(4)}$	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	-1	-1	
$\chi_{22}^{(5)}$	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	-1	-1	
$\chi_{22}^{(6)}$	-1	1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
$\chi_{22}^{(7)}$	-1	1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
$\chi_{22}^{(8)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
$\chi_{22}^{(9)}$	1	1	-1	A	-A	-A	A	1	-1	-1	1	-A	A	-1	1	-A	A	A	-A	-1	1	A	-A	
$\chi_{22}^{(10)}$	1	1	-1	-A	A	A	-A	1	-1	-1	1	A	-A	-1	1	A	-A	-A	A	-1	1	-A	A	

	80								90								100							
$\chi_{22}^{(11)}$	1	1	-1	A	-A	-A	A	1	-1	-1	1	-A	A	-1	1	-A	A	A	-A	-1	1	A	-A	
$\chi_{22}^{(12)}$	1	1	-1	-A	A	A	-A	1	-1	-1	1	A	-A	-1	1	A	-A	-A	A	-1	1	-A	A	
$\chi_{22}^{(13)}$	-1	1	-1	A	-A	-A	A	1	-1	-1	1	-A	A	1	-1	A	-A	-A	A	1	-1	-A	A	
$\chi_{22}^{(14)}$	-1	1	-1	-A	A	A	-A	1	-1	-1	1	A	-A	1	-1	-A	A	A	-A	1	-1	A	-A	
$\chi_{22}^{(15)}$	-1	1	-1	A	-A	-A	A	1	-1	-1	1	-A	A	1	-1	A	-A	-A	A	1	-1	-A	A	
$\chi_{22}^{(16)}$	-1	1	-1	-A	A	A	-A	1	-1	-1	1	A	-A	1	-1	-A	A	A	-A	1	-1	A	-A	
$\chi_{22}^{(17)}$	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(18)}$	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(19)}$	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(20)}$	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(21)}$	-1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(22)}$	-1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(23)}$	-1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(24)}$	-1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(25)}$	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(26)}$	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(27)}$	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(28)}$	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(29)}$	-1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(30)}$	-1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(31)}$	-1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(32)}$	-1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(33)}$	-1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
$\chi_{22}^{(34)}$	-1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
$\chi_{22}^{(35)}$	-1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	-1	-1	
$\chi_{22}^{(36)}$	-1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	-1	-1	
$\chi_{22}^{(37)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
$\chi_{22}^{(38)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
$\chi_{22}^{(39)}$	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	1	1	
$\chi_{22}^{(40)}$	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	1	1	
$\chi_{22}^{(41)}$	.	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	1	1
$\chi_{22}^{(42)}$	.	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	1	1
$\chi_{22}^{(43)}$	.	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	-1	-1
$\chi_{22}^{(44)}$	.	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	-1	-1
$\chi_{22}^{(45)}$	.	1	1	1	1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1
$\chi_{22}^{(46)}$	.	1	1	1	1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1
$\chi_{22}^{(47)}$	.	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1
$\chi_{22}^{(48)}$	.	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1
$\chi_{22}^{(49)}$	-1	1	-1	A	-A	-A	A	1	-1	-1	1	-A	A	-1	1	-A	A	A	-A	-1	1	A	-A	
$\chi_{22}^{(50)}$	-1	1	-1	-A	A	A	-A	1	-1	-1	1	A	-A	-1	1	A	-A	-A	A	-1	1	-A	A	
$\chi_{22}^{(51)}$	-1	1	-1	A	-A	-A	A	1	-1	-1	1	-A	A	-1	1	-A	A	A	-A	-1	1	A	-A	
$\chi_{22}^{(52)}$	-1	1	-1	-A	A	A	-A	1	-1	-1	1	A	-A	-1	1	A	-A	-A	A	-1	1	-A	A	
$\chi_{22}^{(53)}$	1	1	-1	A	-A	-A	A	1	-1	-1	1	-A	A	1	-1	A	-A	-A	A	1	-1	-A	A	
$\chi_{22}^{(54)}$	1	1	-1	-A	A	A	-A	1	-1	-1	1	A	-A	1	-1	-A	A	A	-A	1	-1	A	-A	
$\chi_{22}^{(55)}$	1	1	-1	A	-A	-A	A	1	-1	-1	1	-A	A	1	-1	A	-A	-A	A	1	-1	-A	A	

	80										90										100									
$\chi_{22}^{(56)}$	1	1	-1	-A	A	A	-A	1	-1	-1	1	A	-A	1	-1	-A	A	A	-A	1	-1	A	-A							
$\chi_{22}^{(57)}$	.	1	-1	A	-A	A	-A	-1	1	-1	1	-A	A	1	-1	A	-A	A	-A	-1	1	A	-A						
$\chi_{22}^{(58)}$	.	1	-1	-A	A	-A	A	-1	1	-1	1	A	-A	1	-1	-A	A	-A	A	-1	1	-A	A						
$\chi_{22}^{(59)}$	.	1	-1	A	-A	A	-A	-1	1	-1	1	-A	A	1	-1	A	-A	A	-A	-1	1	A	-A						
$\chi_{22}^{(60)}$	.	1	-1	-A	A	-A	A	-1	1	-1	1	A	-A	1	-1	-A	A	-A	A	-1	1	-A	A						
$\chi_{22}^{(61)}$	.	1	-1	A	-A	A	-A	-1	1	-1	1	-A	A	-1	1	-A	A	-A	A	1	-1	-A	A						
$\chi_{22}^{(62)}$	.	1	-1	-A	A	-A	A	-1	1	-1	1	A	-A	-1	1	A	-A	A	-A	1	-1	A	-A						
$\chi_{22}^{(63)}$	.	1	-1	A	-A	A	-A	-1	1	-1	1	-A	A	-1	1	-A	A	-A	A	1	-1	-A	A						
$\chi_{22}^{(64)}$	.	1	-1	-A	A	-A	A	-1	1	-1	1	A	-A	-1	1	A	-A	A	-A	1	-1	A	-A						
$\chi_{22}^{(65)}$	.	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2						
$\chi_{22}^{(66)}$	.	-2	-2	2	2	2	2	-2	-2	-2	-2	2	2	-2	-2	2	2	2	2	-2	-2	2	2						
$\chi_{22}^{(67)}$	.	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	2	2	2	2	2	2	2	2	2	2						
$\chi_{22}^{(68)}$	.	-2	-2	2	2	2	2	-2	-2	-2	-2	2	2	2	2	-2	-2	-2	-2	2	2	-2	-2						
$\chi_{22}^{(69)}$	.	-2	2	I	-I	-I	I	-2	2	2	-2	-I	I	2	-2	-I	I	I	-I	2	-2	I	-I						
$\chi_{22}^{(70)}$	.	-2	2	-I	I	I	-I	-2	2	2	-2	I	-I	2	-2	I	-I	-I	I	2	-2	-I	I						
$\chi_{22}^{(71)}$	.	-2	2	I	-I	-I	I	-2	2	2	-2	-I	I	-2	2	I	-I	-I	I	-2	2	-I	I						
$\chi_{22}^{(72)}$	.	-2	2	-I	I	I	-I	-2	2	2	-2	I	-I	-2	2	-I	I	I	-I	-2	2	I	-I						
$\chi_{22}^{(73)}$	-1	2	2	2	2	.	.	.	.	-2	-2	-2	-2	.	.	.	.	2	2	2	2	-2	-2
$\chi_{22}^{(74)}$	-1	-2	-2	-2	-2	.	.	.	.	2	2	2	2	.	.	.	.	-2	-2	-2	-2	2	2
$\chi_{22}^{(75)}$	-1	2	2	2	2	.	.	.	.	-2	-2	-2	-2	.	.	.	.	2	2	2	2	-2	-2
$\chi_{22}^{(76)}$	-1	-2	-2	-2	-2	.	.	.	.	2	2	2	2	.	.	.	.	-2	-2	-2	-2	2	2
$\chi_{22}^{(77)}$	-1	2	2	-2	-2	.	.	.	.	-2	-2	2	2	.	.	.	.	-2	-2	2	2	2	2
$\chi_{22}^{(78)}$	-1	-2	-2	2	2	.	.	.	.	2	2	-2	-2	.	.	.	.	2	2	-2	-2	-2	-2
$\chi_{22}^{(79)}$	-1	2	2	-2	-2	.	.	.	.	-2	-2	2	2	.	.	.	.	-2	-2	2	2	2	2
$\chi_{22}^{(80)}$	-1	-2	-2	2	2	.	.	.	.	2	2	-2	-2	.	.	.	.	2	2	-2	-2	-2	-2
$\chi_{22}^{(81)}$	1	2	2	2	2	.	.	.	.	-2	-2	-2	-2	.	.	.	.	-2	-2	-2	-2	2	2
$\chi_{22}^{(82)}$	1	-2	-2	-2	-2	.	.	.	.	2	2	2	2	.	.	.	.	2	2	2	2	-2	-2
$\chi_{22}^{(83)}$	1	2	2	2	2	.	.	.	.	-2	-2	-2	-2	.	.	.	.	-2	-2	-2	-2	2	2
$\chi_{22}^{(84)}$	1	-2	-2	-2	-2	.	.	.	.	2	2	2	2	.	.	.	.	2	2	2	2	-2	-2
$\chi_{22}^{(85)}$	1	2	2	-2	-2	.	.	.	.	-2	-2	2	2	.	.	.	.	2	2	-2	-2	-2	-2
$\chi_{22}^{(86)}$	1	-2	-2	2	2	.	.	.	.	2	2	-2	-2	.	.	.	.	-2	-2	2	2	2	2
$\chi_{22}^{(87)}$	1	2	2	-2	-2	.	.	.	.	-2	-2	2	2	.	.	.	.	2	2	-2	-2	-2	-2
$\chi_{22}^{(88)}$	1	-2	-2	2	2	.	.	.	.	2	2	-2	-2	.	.	.	.	-2	-2	2	2	2	2
$\chi_{22}^{(89)}$	.	2	2	2	2	-2	-2	-2	-2	2	2	2	2	-2	-2	-2	-2	2	2	2	2	2	2						
$\chi_{22}^{(90)}$	.	2	2	-2	-2	2	2	-2	-2	2	2	-2	-2	-2	-2	2	2	-2	-2	2	2	-2	-2						
$\chi_{22}^{(91)}$	.	2	2	2	2	-2	-2	-2	-2	2	2	2	2	2	2	2	2	-2	-2	-2	-2	-2	-2						
$\chi_{22}^{(92)}$	.	2	2	-2	-2	2	2	-2	-2	2	2	-2	-2	2	2	-2	-2	2	2	-2	-2	2	2						
$\chi_{22}^{(93)}$	.	2	-2	-I	I	-I	I	-2	2	-2	2	I	-I	2	-2	-I	I	-I	I	-2	2	-I	I						
$\chi_{22}^{(94)}$	.	2	-2	I	-I	I	-I	-2	2	-2	2	-I	I	2	-2	I	-I	I	-I	-2	2	I	-I						
$\chi_{22}^{(95)}$	.	2	-2	-I	I	-I	I	-2	2	-2	2	I	-I	-2	2	I	-I	I	-I	2	-2	I	-I						
$\chi_{22}^{(96)}$	.	2	-2	I	-I	I	-I	-2	2	-2	2	-I	I	-2	2	-I	I	-I	I	2	-2	-I	I						
$\chi_{22}^{(97)}$	-1	2	-2	-I	I	.	.	.	.	2	-2	-I	I	.	.	.	.	-I	I	-2	2	I	-I
$\chi_{22}^{(98)}$	-1	2	-2	I	-I	.	.	.	.	2	-2	I	-I	.	.	.	.	I	-I	-2	2	-I	I
$\chi_{22}^{(99)}$	-1	-2	2	I	-I	.	.	.	.	-2	2	I	-I	.	.	.	.	I	-I	2	-2	-I	I
$\chi_{22}^{(100)}$	-1	-2	2	-I	I	.	.	.	.	-2	2	-I	I	.	.	.	.	-I	I	2	-2	I	-I

	80								90								100							
$\chi_{22}^{(101)}$	-1	2	-2	-I	I	.	.	.	.	2	-2	-I	I	.	.	.	.	-I	I	-2	2	I	-I
$\chi_{22}^{(102)}$	-1	2	-2	I	-I	.	.	.	.	2	-2	I	-I	.	.	.	.	I	-I	-2	2	-I	I
$\chi_{22}^{(103)}$	-1	-2	2	I	-I	.	.	.	.	-2	2	I	-I	.	.	.	.	I	-I	2	-2	-I	I
$\chi_{22}^{(104)}$	-1	-2	2	-I	I	.	.	.	.	-2	2	-I	I	.	.	.	.	-I	I	2	-2	I	-I
$\chi_{22}^{(105)}$	1	2	-2	-I	I	.	.	.	.	2	-2	-I	I	.	.	.	.	I	-I	2	-2	-I	I
$\chi_{22}^{(106)}$	1	2	-2	I	-I	.	.	.	.	2	-2	I	-I	.	.	.	.	-I	I	2	-2	I	-I
$\chi_{22}^{(107)}$	1	-2	2	I	-I	.	.	.	.	-2	2	I	-I	.	.	.	.	-I	I	-2	2	I	-I
$\chi_{22}^{(108)}$	1	-2	2	-I	I	.	.	.	.	-2	2	-I	I	.	.	.	.	I	-I	-2	2	-I	I
$\chi_{22}^{(109)}$	1	2	-2	-I	I	.	.	.	.	2	-2	-I	I	.	.	.	.	I	-I	2	-2	-I	I
$\chi_{22}^{(110)}$	1	2	-2	I	-I	.	.	.	.	2	-2	I	-I	.	.	.	.	-I	I	2	-2	I	-I
$\chi_{22}^{(111)}$	1	-2	2	I	-I	.	.	.	.	-2	2	I	-I	.	.	.	.	-I	I	-2	2	I	-I
$\chi_{22}^{(112)}$	1	-2	2	-I	I	.	.	.	.	-2	2	-I	I	.	.	.	.	I	-I	-2	2	-I	I
$\chi_{22}^{(113)}$	.	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	-1	-1
$\chi_{22}^{(114)}$	.	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	-1	-1
$\chi_{22}^{(115)}$	.	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	1	1
$\chi_{22}^{(116)}$	.	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	1	1
$\chi_{22}^{(117)}$	.	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1
$\chi_{22}^{(118)}$	.	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1
$\chi_{22}^{(119)}$	.	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1
$\chi_{22}^{(120)}$	.	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1
$\chi_{22}^{(121)}$	.	-1	1	-A	A	-A	A	1	-1	1	-1	A	-A	-1	1	-A	A	-A	A	1	-1	-A	A
$\chi_{22}^{(122)}$	.	-1	1	A	-A	A	-A	1	-1	1	-1	-A	A	-1	1	A	-A	A	-A	1	-1	A	-A
$\chi_{22}^{(123)}$	.	-1	1	-A	A	-A	A	1	-1	1	-1	A	-A	-1	1	-A	A	-A	A	1	-1	-A	A
$\chi_{22}^{(124)}$	.	-1	1	A	-A	A	-A	1	-1	1	-1	-A	A	-1	1	A	-A	A	-A	1	-1	A	-A
$\chi_{22}^{(125)}$	.	-1	1	-A	A	-A	A	1	-1	1	-1	A	-A	1	-1	A	-A	A	-A	-1	1	A	-A
$\chi_{22}^{(126)}$	.	-1	1	A	-A	A	-A	1	-1	1	-1	-A	A	1	-1	-A	A	-A	A	-1	1	-A	A
$\chi_{22}^{(127)}$	.	-1	1	-A	A	-A	A	1	-1	1	-1	A	-A	1	-1	A	-A	A	-A	-1	1	A	-A
$\chi_{22}^{(128)}$	.	-1	1	A	-A	A	-A	1	-1	1	-1	-A	A	1	-1	-A	A	-A	A	-1	1	-A	A
$\chi_{22}^{(129)}$	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(130)}$	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(131)}$	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(132)}$	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(133)}$	-1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(134)}$	-1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(135)}$	-1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(136)}$	-1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(137)}$	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(138)}$	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(139)}$	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(140)}$	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(141)}$	-1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(142)}$	-1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(143)}$	-1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(144)}$	-1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

	110												120											
$\chi_{22}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
$\chi_{22}^{(2)}$	-1	-1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	1	-1
$\chi_{22}^{(3)}$	-1	-1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	-1	1
$\chi_{22}^{(4)}$	1	1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	-1
$\chi_{22}^{(5)}$	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	1
$\chi_{22}^{(6)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1
$\chi_{22}^{(7)}$	-1	-1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1
$\chi_{22}^{(8)}$	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_{22}^{(9)}$	-1	1	-1	1	-A	A	A	-A	-1	1	1	-1	A	-A	-A	A	1	-1	-1	1	-A	A	A	-A
$\chi_{22}^{(10)}$	-1	1	-1	1	A	-A	-A	A	-1	1	1	-1	-A	A	A	-A	1	-1	-1	1	A	-A	-A	A
$\chi_{22}^{(11)}$	-1	1	1	-1	A	-A	-A	A	1	-1	-1	1	-A	A	A	-A	-1	1	1	-1	A	-A	-A	A
$\chi_{22}^{(12)}$	-1	1	1	-1	-A	A	A	-A	1	-1	-1	1	A	-A	-A	A	-1	1	1	-1	-A	A	A	-A
$\chi_{22}^{(13)}$	1	-1	-1	1	-A	A	A	-A	-1	1	-1	1	-A	A	A	-A	-1	1	-1	1	-A	A	A	-A
$\chi_{22}^{(14)}$	1	-1	-1	1	A	-A	-A	A	-1	1	-1	1	A	-A	-A	A	-1	1	-1	1	A	-A	-A	A
$\chi_{22}^{(15)}$	1	-1	1	-1	A	-A	-A	A	1	-1	1	-1	A	-A	-A	A	1	-1	1	-1	A	-A	-A	A
$\chi_{22}^{(16)}$	1	-1	1	-1	-A	A	A	-A	1	-1	1	-1	-A	A	A	-A	1	-1	1	-1	-A	A	A	-A
$\chi_{22}^{(17)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1	1	1	1	1	1
$\chi_{22}^{(18)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	-1	-1	-1	-1	-1	-1
$\chi_{22}^{(19)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1	-1	-1	-1	-1	1
$\chi_{22}^{(20)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	-1	1	1	1	1	-1
$\chi_{22}^{(21)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1	1	1	1	1	1
$\chi_{22}^{(22)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	-1	-1	-1	-1	-1	-1
$\chi_{22}^{(23)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1	-1	-1	-1	-1	1
$\chi_{22}^{(24)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	-1	1	1	1	1	-1
$\chi_{22}^{(25)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	-1	A	-A	-A	A	1
$\chi_{22}^{(26)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	-1	-A	A	A	-A	1
$\chi_{22}^{(27)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	1	-A	A	A	-A	-1
$\chi_{22}^{(28)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	1	A	-A	-A	A	-1
$\chi_{22}^{(29)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	-1	A	-A	-A	A	1
$\chi_{22}^{(30)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	-1	-A	A	A	-A	1
$\chi_{22}^{(31)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	1	-A	A	A	-A	-1
$\chi_{22}^{(32)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	1	A	-A	-A	A	-1
$\chi_{22}^{(33)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1
$\chi_{22}^{(34)}$	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1
$\chi_{22}^{(35)}$	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	1	-1
$\chi_{22}^{(36)}$	1	1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	-1	1
$\chi_{22}^{(37)}$	-1	-1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_{22}^{(38)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{22}^{(39)}$	-1	-1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	-1
$\chi_{22}^{(40)}$	-1	-1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	1
$\chi_{22}^{(41)}$	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	.	.	.	.	.	.
$\chi_{22}^{(42)}$	1	1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	.	.	.	.	.	.
$\chi_{22}^{(43)}$	1	1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	.	.	.	.	.	.
$\chi_{22}^{(44)}$	1	1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	.	.	.	.	.	.
$\chi_{22}^{(45)}$	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	.	.	.	.	.	.

[illegible]

	110																120															
$\chi_{22}^{(91)}$	-2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(92)}$	-2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(93)}$	-2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(94)}$	-2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(95)}$	2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(96)}$	2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(97)}$	2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	1	-A	A	-A	A	1								
$\chi_{22}^{(98)}$	2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	1	A	-A	A	-A	1								
$\chi_{22}^{(99)}$	-2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	-1	A	-A	A	-A	-1								
$\chi_{22}^{(100)}$	-2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	-1	-A	A	-A	A	-1								
$\chi_{22}^{(101)}$	2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	-1	A	-A	A	-A	-1								
$\chi_{22}^{(102)}$	2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	-1	-A	A	-A	A	-1								
$\chi_{22}^{(103)}$	-2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	1	-A	A	-A	A	1								
$\chi_{22}^{(104)}$	-2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	1	A	-A	A	-A	1								
$\chi_{22}^{(105)}$	-2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	1	-A	A	-A	A	1								
$\chi_{22}^{(106)}$	-2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	1	A	-A	A	-A	1								
$\chi_{22}^{(107)}$	2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	-1	A	-A	A	-A	-1								
$\chi_{22}^{(108)}$	2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	-1	-A	A	-A	A	-1								
$\chi_{22}^{(109)}$	-2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	-1	A	-A	A	-A	-1								
$\chi_{22}^{(110)}$	-2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	-1	-A	A	-A	A	-1								
$\chi_{22}^{(111)}$	2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	1	-A	A	-A	A	1								
$\chi_{22}^{(112)}$	2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	1	A	-A	A	-A	1								
$\chi_{22}^{(113)}$	-1	-1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	.	.	.	.	..	.			
$\chi_{22}^{(114)}$	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	-1	-1	-1	-1	..	.	.	.	.	.			
$\chi_{22}^{(115)}$	-1	-1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	.	.	.	.	.				
$\chi_{22}^{(116)}$	-1	-1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	.	.	..	.	.	.		
$\chi_{22}^{(117)}$	1	1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	.	.	.	.	.	.		
$\chi_{22}^{(118)}$	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	.	.	.	.	.	.		
$\chi_{22}^{(119)}$	1	1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	.	.	.	.	.	.		
$\chi_{22}^{(120)}$	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	.	.	.	.	.	.		
$\chi_{22}^{(121)}$	1	-1	1	-1	A	-A	A	-A	-1	1	1	-1	A	-A	A	-A	-1	1	.	.	.	.	.	.		
$\chi_{22}^{(122)}$	1	-1	1	-1	-A	A	-A	A	-1	1	1	-1	-A	A	-A	A	-1	1	.	.	.	.	.	.		
$\chi_{22}^{(123)}$	1	-1	-1	1	-A	A	-A	A	1	-1	-1	1	-A	A	-A	A	1	-1	.	.	.	.	.	.		
$\chi_{22}^{(124)}$	1	-1	-1	1	A	-A	A	-A	1	-1	-1	1	A	-A	A	-A	1	-1	.	.	.	.	.	.		
$\chi_{22}^{(125)}$	-1	1	1	-1	A	-A	A	-A	-1	1	-1	1	-A	A	-A	A	1	-1	.	.	.	.	.	.		
$\chi_{22}^{(126)}$	-1	1	1	-1	-A	A	-A	A	-1	1	-1	1	A	-A	A	-A	1	-1	.	.	.	.	.	.		
$\chi_{22}^{(127)}$	-1	1	-1	1	-A	A	-A	A	1	-1	1	-1	A	-A	A	-A	-1	1	.	.	.	.	.	.		
$\chi_{22}^{(128)}$	-1	1	-1	1	A	-A	A	-A	1	-1	1	-1	-A	A	-A	A	-1	1	.	.	.	.	.	.		
$\chi_{22}^{(129)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1	1	1	-1	-1	-1								
$\chi_{22}^{(130)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	-1	-1	-1	1	1	1								
$\chi_{22}^{(131)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1	-1	-1	1	1	-1								
$\chi_{22}^{(132)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	-1	1	1	-1	-1	1								
$\chi_{22}^{(133)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1	1	1	-1	-1	-1								
$\chi_{22}^{(134)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	-1	-1	-1	1	1	1								
$\chi_{22}^{(135)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1	-1	-1	1	1	-1								

	110										120											
$\chi_{22}^{(136)}$	-1	-1	1	1	-1	-1	1
$\chi_{22}^{(137)}$	1	-1	A	-A	A	-A
$\chi_{22}^{(138)}$	1	-1	-A	A	-A	A
$\chi_{22}^{(139)}$	-1	1	-A	A	-A	A
$\chi_{22}^{(140)}$	-1	1	A	-A	A	-A
$\chi_{22}^{(141)}$	1	-1	A	-A	A	-A
$\chi_{22}^{(142)}$	1	-1	-A	A	-A	A
$\chi_{22}^{(143)}$	-1	1	-A	A	-A	A
$\chi_{22}^{(144)}$	-1	1	A	-A	A	-A
	130										140											
$\chi_{22}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
$\chi_{22}^{(2)}$	-1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1					
$\chi_{22}^{(3)}$	1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1					
$\chi_{22}^{(4)}$	-1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1					
$\chi_{22}^{(5)}$	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1					
$\chi_{22}^{(6)}$	-1	1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1					
$\chi_{22}^{(7)}$	1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1					
$\chi_{22}^{(8)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1					
$\chi_{22}^{(9)}$	1	1	-1	A	-A	-A	A	1	-1	1	-1	A	-A	-1	1	-A	A					
$\chi_{22}^{(10)}$	1	1	-1	-A	A	A	-A	1	-1	1	-1	-A	A	-1	1	A	-A					
$\chi_{22}^{(11)}$	-1	-1	1	-A	A	A	-A	-1	1	1	-1	A	-A	-1	1	-A	A					
$\chi_{22}^{(12)}$	-1	-1	1	A	-A	-A	A	-1	1	1	-1	-A	A	-1	1	A	-A					
$\chi_{22}^{(13)}$	1	-1	1	-A	A	A	-A	-1	1	1	-1	A	-A	1	-1	A	-A					
$\chi_{22}^{(14)}$	1	-1	1	A	-A	-A	A	-1	1	1	-1	-A	A	1	-1	-A	A					
$\chi_{22}^{(15)}$	-1	1	-1	A	-A	-A	A	1	-1	1	-1	A	-A	1	-1	A	-A					
$\chi_{22}^{(16)}$	-1	1	-1	-A	A	A	-A	1	-1	1	-1	-A	A	1	-1	-A	A					
$\chi_{22}^{(17)}$	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1					
$\chi_{22}^{(18)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1					
$\chi_{22}^{(19)}$	1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1					
$\chi_{22}^{(20)}$	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1					
$\chi_{22}^{(21)}$	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1					
$\chi_{22}^{(22)}$	-1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	1	1	1	1					
$\chi_{22}^{(23)}$	1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1					
$\chi_{22}^{(24)}$	-1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1					
$\chi_{22}^{(25)}$	-1	-1	1	-A	A	A	-A	-1	1	-1	1	-A	A	1	-1	A	-A					
$\chi_{22}^{(26)}$	-1	-1	1	A	-A	-A	A	-1	1	-1	1	A	-A	1	-1	-A	A					
$\chi_{22}^{(27)}$	1	1	-1	A	-A	-A	A	1	-1	-1	1	-A	A	1	-1	A	-A					
$\chi_{22}^{(28)}$	1	1	-1	-A	A	A	-A	1	-1	-1	1	A	-A	1	-1	-A	A					
$\chi_{22}^{(29)}$	-1	1	-1	A	-A	-A	A	1	-1	-1	1	-A	A	-1	1	-A	A					
$\chi_{22}^{(30)}$	-1	1	-1	-A	A	A	-A	1	-1	-1	1	A	-A	-1	1	A	-A					
$\chi_{22}^{(31)}$	1	-1	1	-A	A	A	-A	-1	1	-1	1	-A	A	-1	1	-A	A					
$\chi_{22}^{(32)}$	1	-1	1	A	-A	-A	A	-1	1	-1	1	A	-A	-1	1	A	-A					
$\chi_{22}^{(33)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	.	.	.	.	.	.	.	.
$\chi_{22}^{(34)}$	1	1	1	1	1	1	1	1	1	.	.	.	.	.	.	.	.
$\chi_{22}^{(35)}$	-1	-1	-1	1	1	1	1	-1	-1	.	.	.	.	.	.	.	.

	130								140							
$\chi_{22}^{(36)}$	1	1	1	-1	-1	-1	-1	1	1	.	.	.	.	.	.	.
$\chi_{22}^{(37)}$	-1	1	1	1	1	1	1	1	1	.	.	.	.	.	.	.
$\chi_{22}^{(38)}$	1	-1	-1	-1	-1	-1	-1	-1	-1	.	.	.	.	.	.	.
$\chi_{22}^{(39)}$	-1	1	1	-1	-1	-1	-1	1	1	.	.	.	.	.	.	.
$\chi_{22}^{(40)}$	1	-1	-1	1	1	1	1	-1	-1	.	.	.	.	.	.	.
$\chi_{22}^{(41)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(42)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(43)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(44)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(45)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(46)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(47)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(48)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(49)}$	1	1	-1	A	-A	-A	A	1	-1	.	.	.	.	.	.	.
$\chi_{22}^{(50)}$	1	1	-1	-A	A	A	-A	1	-1	.	.	.	.	.	.	.
$\chi_{22}^{(51)}$	-1	-1	1	-A	A	A	-A	-1	1	.	.	.	.	.	.	.
$\chi_{22}^{(52)}$	-1	-1	1	A	-A	-A	A	-1	1	.	.	.	.	.	.	.
$\chi_{22}^{(53)}$	1	-1	1	-A	A	A	-A	-1	1	.	.	.	.	.	.	.
$\chi_{22}^{(54)}$	1	-1	1	A	-A	-A	A	-1	1	.	.	.	.	.	.	.
$\chi_{22}^{(55)}$	-1	1	-1	A	-A	-A	A	1	-1	.	.	.	.	.	.	.
$\chi_{22}^{(56)}$	-1	1	-1	-A	A	A	-A	1	-1	.	.	.	.	.	.	.
$\chi_{22}^{(57)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(58)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(59)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(60)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(61)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(62)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(63)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(64)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(65)}$	.	.	.	.	.	.	.	.	.	1	1	1	1	1	1	1
$\chi_{22}^{(66)}$	.	.	.	.	.	.	.	.	.	1	1	-1	-1	1	1	-1
$\chi_{22}^{(67)}$	.	.	.	.	.	.	.	.	.	1	1	1	1	-1	-1	-1
$\chi_{22}^{(68)}$	.	.	.	.	.	.	.	.	.	1	1	-1	-1	-1	-1	1
$\chi_{22}^{(69)}$	.	.	.	.	.	.	.	.	.	1	-1	A	-A	-1	1	-A
$\chi_{22}^{(70)}$	.	.	.	.	.	.	.	.	.	1	-1	-A	A	-1	1	A
$\chi_{22}^{(71)}$	.	.	.	.	.	.	.	.	.	1	-1	A	-A	1	-1	A
$\chi_{22}^{(72)}$	.	.	.	.	.	.	.	.	.	1	-1	-A	A	1	-1	-A
$\chi_{22}^{(73)}$	1	-1	-1	-1	-1	1	1	1	1	.	.	.	.	.	.	.
$\chi_{22}^{(74)}$	-1	1	1	1	1	-1	-1	-1	-1	.	.	.	.	.	.	.
$\chi_{22}^{(75)}$	-1	1	1	1	1	-1	-1	-1	-1	.	.	.	.	.	.	.
$\chi_{22}^{(76)}$	1	-1	-1	-1	-1	1	1	1	1	.	.	.	.	.	.	.
$\chi_{22}^{(77)}$	1	-1	-1	1	1	-1	-1	1	1	.	.	.	.	.	.	.
$\chi_{22}^{(78)}$	-1	1	1	-1	-1	1	1	-1	-1	.	.	.	.	.	.	.
$\chi_{22}^{(79)}$	-1	1	1	-1	-1	1	1	-1	-1	.	.	.	.	.	.	.
$\chi_{22}^{(80)}$	1	-1	-1	1	1	-1	-1	1	1	.	.	.	.	.	.	.

	130								140							
$\chi_{22}^{(126)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(127)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(128)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{22}^{(129)}$	-1	1	1	1	1	-1	-1	-1	-1	.	.	.	.	.	.	.
$\chi_{22}^{(130)}$	1	-1	-1	-1	-1	1	1	1	1	.	.	.	.	.	.	.
$\chi_{22}^{(131)}$	-1	1	1	-1	-1	1	1	-1	-1	.	.	.	.	.	.	.
$\chi_{22}^{(132)}$	1	-1	-1	1	1	-1	-1	1	1	.	.	.	.	.	.	.
$\chi_{22}^{(133)}$	-1	-1	-1	-1	-1	1	1	1	1	.	.	.	.	.	.	.
$\chi_{22}^{(134)}$	1	1	1	1	1	-1	-1	-1	-1	.	.	.	.	.	.	.
$\chi_{22}^{(135)}$	-1	-1	-1	1	1	-1	-1	1	1	.	.	.	.	.	.	.
$\chi_{22}^{(136)}$	1	1	1	-1	-1	1	1	-1	-1	.	.	.	.	.	.	.
$\chi_{22}^{(137)}$	1	-1	1	-A	A	-A	A	1	-1	.	.	.	.	.	.	.
$\chi_{22}^{(138)}$	1	-1	1	A	-A	A	-A	1	-1	.	.	.	.	.	.	.
$\chi_{22}^{(139)}$	-1	1	-1	A	-A	A	-A	-1	1	.	.	.	.	.	.	.
$\chi_{22}^{(140)}$	-1	1	-1	-A	A	-A	A	-1	1	.	.	.	.	.	.	.
$\chi_{22}^{(141)}$	1	1	-1	A	-A	A	-A	-1	1	.	.	.	.	.	.	.
$\chi_{22}^{(142)}$	1	1	-1	-A	A	-A	A	-1	1	.	.	.	.	.	.	.
$\chi_{22}^{(143)}$	-1	-1	1	-A	A	-A	A	1	-1	.	.	.	.	.	.	.
$\chi_{22}^{(144)}$	-1	-1	1	A	-A	A	-A	1	-1	.	.	.	.	.	.	.

where $A = -E(4) = -ER(-1) = -i$, $B = -4^*E(4) = -4^*ER(-1) = -4i$, $C = -5^*E(4) = -5^*ER(-1) = -5i$, $D = -6^*E(4) = -6^*ER(-1) = -6i$, $E = -10^*E(4) = -10^*ER(-1) = -10i$, $F = -15^*E(4) = -15^*ER(-1) = -15i$, $G = -20^*E(4) = -20^*ER(-1) = -20i$, $H = -3^*E(4) = -3^*ER(-1) = -3i$, $I = 2^*E(4) = 2^*ER(-1) = 2i$, $J = -9^*E(4) = -9^*ER(-1) = -9i$.

The generators of $G^{s_{23}}$ are:

$$\begin{pmatrix} 0 & 0 & -1 & 1 & -1 & 2 & -1 & -1 \\ 1 & -1 & -2 & 2 & -2 & 3 & -1 & -1 \\ 1 & 0 & -2 & 2 & -3 & 4 & -1 & -2 \\ 1 & -1 & -3 & 3 & -4 & 6 & -1 & -3 \\ 1 & -1 & -3 & 3 & -3 & 4 & 0 & -3 \\ 0 & -1 & -2 & 3 & -3 & 3 & 0 & -2 \\ 0 & 0 & -2 & 2 & -2 & 2 & 0 & -1 \\ 0 & 0 & -1 & 1 & -1 & 1 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & -1 & 0 & 1 & -1 & 1 & 0 \\ 0 & 1 & -1 & 0 & 1 & -1 & 1 & 0 \\ 0 & 0 & -1 & 0 & 2 & -2 & 2 & 0 \\ 0 & 0 & -2 & 1 & 2 & -2 & 2 & 0 \\ 0 & 0 & -1 & 0 & 2 & -1 & 1 & 0 \\ 0 & 0 & -1 & 0 & 1 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 1 & 1 & 0 & -1 & 0 & 1 & 0 & -1 \\ 0 & 2 & 0 & -1 & 0 & 1 & 0 & -1 \\ 0 & 2 & 1 & -2 & 0 & 2 & 0 & -2 \\ 0 & 3 & 0 & -2 & 0 & 3 & 0 & -3 \\ 0 & 2 & 0 & -2 & 1 & 2 & 0 & -2 \\ 0 & 1 & 0 & -1 & 0 & 2 & 0 & -1 \\ 0 & 1 & 0 & -1 & 0 & 1 & 1 & -1 \\ 0 & 1 & 0 & -1 & 0 & 1 & 0 & 0 \end{pmatrix},$$

$$\begin{pmatrix} 0 & 1 & -1 & 0 & -1 & 1 & 0 & 1 \\ 0 & 1 & -1 & 0 & -1 & 1 & -1 & 3 \\ 0 & 2 & -1 & -1 & -1 & 1 & 0 & 3 \\ 0 & 2 & -1 & -1 & -2 & 2 & -1 & 5 \\ -1 & 2 & 0 & -1 & -2 & 2 & -1 & 4 \\ -1 & 2 & 0 & -1 & -1 & 1 & -1 & 3 \\ 0 & 2 & 0 & -1 & -1 & 1 & -1 & 2 \\ 0 & 1 & 0 & -1 & 0 & 1 & -1 & 1 \end{pmatrix}.$$

The character table of $G^{s_{23}}$:

	10										20													
$\chi_{23}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
$\chi_{23}^{(2)}$	1	-1	-1	1	-1	1	-1	1	1	-1	-1	-1	1	1	1	-1	1	-1	-1	-1	1	1	-1	1
$\chi_{23}^{(3)}$	1	-1	-1	1	-1	1	1	-1	-1	1	1	1	-1	-1	-1	1	1	-1	1	-1	1	1	-1	-1
$\chi_{23}^{(4)}$	1	-1	1	1	-1	1	1	1	-1	-1	1	1	1	-1	-1	-1	-1	-1	1	1	1	-1	-1	-1
$\chi_{23}^{(5)}$	1	-1	1	1	-1	1	-1	-1	1	1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	-1	-1	1
$\chi_{23}^{(6)}$	1	1	-1	1	1	1	1	-1	1	-1	1	1	-1	1	1	-1	-1	1	1	-1	1	-1	1	1
$\chi_{23}^{(7)}$	1	1	-1	1	1	1	-1	1	-1	1	-1	-1	1	-1	-1	1	-1	1	-1	-1	1	-1	1	-1
$\chi_{23}^{(8)}$	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	-1	1	1	1	1	1	-1
$\chi_{23}^{(9)}$	1	A	A	-A	A	-A	-1	1	1	-1	-1	/A	-/A	1	-/A	/A	-B	B	/A	B	-B	-/B	/B	-/A
$\chi_{23}^{(10)}$	1	B	B	-B	B	-B	-1	1	1	-1	-1	/B	-/B	1	-/B	/B	-/A	/A	/B	/A	-/A	-A	A	-/B
$\chi_{23}^{(11)}$	1	/B	/B	-/B	/B	-/B	-1	1	1	-1	-1	B	-B	1	-B	B	-A	A	B	A	-A	-/A	/A	-B
$\chi_{23}^{(12)}$	1	/A	/A	-/A	/A	-/A	-1	1	1	-1	-1	A	-A	1	-A	A	-/B	/B	A	/B	-/B	-B	B	-A
$\chi_{23}^{(13)}$	1	A	A	-A	A	-A	1	-1	-1	1	1	-/A	/A	-1	/A	-/A	-B	B	-/A	B	-B	-/B	/B	/A
$\chi_{23}^{(14)}$	1	B	B	-B	B	-B	1	-1	-1	1	1	-/B	/B	-1	/B	-/B	-/A	/A	-/B	/A	-/A	-A	A	/B
$\chi_{23}^{(15)}$	1	/B	/B	-/B	/B	-/B	1	-1	-1	1	1	-B	B	-1	B	-B	-A	A	-B	A	-A	-/A	/A	B
$\chi_{23}^{(16)}$	1	/A	/A	-/A	/A	-/A	1	-1	-1	1	1	-A	A	-1	A	-A	-/B	/B	-A	/B	-/B	-B	B	A
$\chi_{23}^{(17)}$	1	A	-A	-A	A	-A	1	1	-1	-1	1	-/A	-/A	-1	/A	/A	B	B	-/A	-B	-B	/B	/B	/A
$\chi_{23}^{(18)}$	1	B	-B	-B	B	-B	1	1	-1	-1	1	-/B	-/B	-1	/B	/B	/A	/A	-/B	-/A	-/A	A	A	/B
$\chi_{23}^{(19)}$	1	/B	-/B	-/B	/B	-/B	1	1	-1	-1	1	-B	-B	-1	B	B	A	A	-B	-A	-A	/A	/A	B
$\chi_{23}^{(20)}$	1	/A	-/A	-/A	/A	-/A	1	1	-1	-1	1	-A	-A	-1	A	A	/B	/B	-A	-/B	-/B	B	B	A
$\chi_{23}^{(21)}$	1	A	-A	-A	A	-A	-1	-1	1	1	-1	/A	/A	1	-/A	-/A	B	B	/A	-B	-B	/B	/B	-/A
$\chi_{23}^{(22)}$	1	B	-B	-B	B	-B	-1	-1	1	1	-1	/B	/B	1	-/B	-/B	/A	/A	/B	-/A	-/A	A	A	-/B
$\chi_{23}^{(23)}$	1	/B	-/B	-/B	/B	-/B	-1	-1	1	1	-1	B	B	1	-B	-B	A	A	B	-A	-A	/A	/A	-B
$\chi_{23}^{(24)}$	1	/A	-/A	-/A	/A	-/A	-1	-1	1	1	-1	A	A	1	-A	-A	/B	/B	A	-/B	-/B	B	B	-A
$\chi_{23}^{(25)}$	1	-/A	/A	-/A	-/A	-/A	1	-1	1	-1	1	-A	A	1	-A	A	/B	-/B	-A	/B	-/B	B	-B	-A
$\chi_{23}^{(26)}$	1	-/B	/B	-/B	-/B	-/B	1	-1	1	-1	1	-B	B	1	-B	B	A	-A	-B	A	-A	/A	-/A	-B
$\chi_{23}^{(27)}$	1	-B	B	-B	-B	-B	1	-1	1	-1	1	-/B	/B	1	-/B	/B	/A	-/A	-/B	/A	-/A	A	-A	-/B
$\chi_{23}^{(28)}$	1	-A	A	-A	-A	-A	1	-1	1	-1	1	-/A	/A	1	-/A	/A	B	-B	-/A	B	-B	/B	-/B	-/A
$\chi_{23}^{(29)}$	1	-/A	/A	-/A	-/A	-/A	-1	1	-1	1	-1	A	-A	-1	A	-A	/B	-/B	A	/B	-/B	B	-B	A
$\chi_{23}^{(30)}$	1	-/B	/B	-/B	-/B	-/B	-1	1	-1	1	-1	B	-B	-1	B	-B	A	-A	B	A	-A	/A	-/A	B
$\chi_{23}^{(31)}$	1	-B	B	-B	-B	-B	-1	1	-1	1	-1	/B	-/B	-1	/B	-/B	/A	-/A	/B	/A	-/A	A	-A	/B
$\chi_{23}^{(32)}$	1	-A	A	-A	-A	-A	-1	1	-1	1	-1	/A	-/A	-1	/A	-/A	B	-B	/A	B	-B	/B	-/B	/A
$\chi_{23}^{(33)}$	1	-/A	-/A	-/A	-/A	-/A	-1	-1	-1	-1	-1	A	A	-1	A	A	-/B	-/B	A	-/B	-/B	-B	-B	A
$\chi_{23}^{(34)}$	1	-/B	-/B	-/B	-/B	-/B	-1	-1	-1	-1	-1	B	B	-1	B	B	-A	-A	B	-A	-A	-/A	-/A	B
$\chi_{23}^{(35)}$	1	-B	-B	-B	-B	-B	-1	-1	-1	-1	-1	/B	/B	-1	/B	/B	-/A	-/A	/B	-/A	-/A	-A	-A	/B
$\chi_{23}^{(36)}$	1	-A	-A	-A	-A	-A	-1	-1	-1	-1	-1	/A	/A	-1	/A	/A	-B	-B	/A	-B	-B	-/B	-/B	/A
$\chi_{23}^{(37)}$	1	-/A	-/A	-/A	-/A	-/A	1	1	1	1	1	-A	-A	1	-A	-A	-/B	-/B	-A	-/B	-/B	-B	-B	-A
$\chi_{23}^{(38)}$	1	-/B	-/B	-/B	-/B	-/B	1	1	1	1	1	-B	-B	1	-B	-B	-A	-A	-B	-A	-A	-/A	-/A	-B
$\chi_{23}^{(39)}$	1	-B	-B	-B	-B	-B	1	1	1	1	1	-/B	-/B	1	-/B	-/B	-/A	-/A	-/B	-/A	-/A	-A	-A	-/B
$\chi_{23}^{(40)}$	1	-A	-A	-A	-A	-A	1	1	1	1	1	-/A	-/A	1	-/A	-/A	-B	-B	-/A	-B	-B	-/B	-/B	-/A
$\chi_{23}^{(41)}$	2	1	.	-1	-2	2	1	.	-1	.	-2	1	.	2	-1	.	.	1	-2	.	-1	.	1	2
$\chi_{23}^{(42)}$	2	1	.	-1	-2	2	-1	.	1	.	2	-1	.	-2	1	.	.	1	2	.	-1	.	1	-2
$\chi_{23}^{(43)}$	2	-1	.	-1	2	2	-1	.	-1	.	2	-1	.	2	-1	.	.	-1	2	.	-1	.	-1	2
$\chi_{23}^{(44)}$	2	-1	.	-1	2	2	1	.	1	.	-2	1	.	-2	1	.	.	-1	-2	.	-1	.	-1	-2
$\chi_{23}^{(45)}$	2	-A	.	A	C	-C	1	.	-1	.	-2	-/A	.	2	/A	.	.	-B	/C	.	B	.	-/B	-/C

	10										20													
$\chi_{23}^{(46)}$	2	-B	.	B	D	-D	1	.	-1	.	-2	-/B	.	2	/B	.	.	-/A	/D	.	/A	.	-A	-/D
$\chi_{23}^{(47)}$	2	-/B	.	/B	/D	-/D	1	.	-1	.	-2	-B	.	2	B	.	.	-A	D	.	A	.	-/A	-D
$\chi_{23}^{(48)}$	2	-/A	.	/A	/C	-/C	1	.	-1	.	-2	-A	.	2	A	.	.	-/B	C	.	/B	.	-B	-C
$\chi_{23}^{(49)}$	2	-A	.	A	C	-C	-1	.	1	.	2	/A	.	-2	-/A	.	.	-B	-/C	.	B	.	-/B	/C
$\chi_{23}^{(50)}$	2	-B	.	B	D	-D	-1	.	1	.	2	/B	.	-2	-/B	.	.	-/A	-/D	.	/A	.	-A	/D
$\chi_{23}^{(51)}$	2	-/B	.	/B	/D	-/D	-1	.	1	.	2	B	.	-2	-B	.	.	-A	-D	.	A	.	-/A	D
$\chi_{23}^{(52)}$	2	-/A	.	/A	/C	-/C	-1	.	1	.	2	A	.	-2	-A	.	.	-/B	-C	.	/B	.	-B	C
$\chi_{23}^{(53)}$	2	A	.	A	-C	-C	-1	.	-1	.	2	/A	.	2	/A	.	.	B	-/C	.	B	.	/B	-/C
$\chi_{23}^{(54)}$	2	B	.	B	-D	-D	-1	.	-1	.	2	/B	.	2	/B	.	.	/A	-/D	.	/A	.	A	-/D
$\chi_{23}^{(55)}$	2	/B	.	/B	-/D	-/D	-1	.	-1	.	2	B	.	2	B	.	.	A	-D	.	A	.	/A	-D
$\chi_{23}^{(56)}$	2	/A	.	/A	-/C	-/C	-1	.	-1	.	2	A	.	2	A	.	.	/B	-C	.	/B	.	B	-C
$\chi_{23}^{(57)}$	2	A	.	A	-C	-C	1	.	1	.	-2	-/A	.	-2	-/A	.	.	B	/C	.	B	.	/B	/C
$\chi_{23}^{(58)}$	2	B	.	B	-D	-D	1	.	1	.	-2	-/B	.	-2	-/B	.	.	/A	/D	.	/A	.	A	/D
$\chi_{23}^{(59)}$	2	/B	.	/B	-/D	-/D	1	.	1	.	-2	-B	.	-2	-B	.	.	A	D	.	A	.	/A	D
$\chi_{23}^{(60)}$	2	/A	.	/A	-/C	-/C	1	.	1	.	-2	-A	.	-2	-A	.	.	/B	C	.	/B	.	B	C
	30										40													
$\chi_{23}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
$\chi_{23}^{(2)}$	-1	1	-1	1	1	-1	-1	1	1	-1	-1	1	-1	-1	1	-1	-1	1	1	-1	1	1	1	
$\chi_{23}^{(3)}$	-1	1	1	-1	-1	1	1	-1	-1	1	1	1	-1	-1	-1	1	-1	1	1	-1	-1	1	1	
$\chi_{23}^{(4)}$	1	1	1	1	-1	-1	1	1	-1	-1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	1	-1	
$\chi_{23}^{(5)}$	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	-1	-1	-1	1	-1	1	1	-1	1	1	-1	
$\chi_{23}^{(6)}$	-1	1	1	-1	1	-1	1	-1	1	-1	1	-1	1	1	1	1	-1	1	1	1	1	1	-1	
$\chi_{23}^{(7)}$	-1	1	-1	1	-1	1	-1	1	-1	1	-1	-1	1	1	-1	-1	-1	1	1	1	-1	1	-1	
$\chi_{23}^{(8)}$	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	-1	-1	1	1	1	1	-1	1	1	
$\chi_{23}^{(9)}$	/B	-/B	/B	-/B	-/B	/B	B	-B	-B	B	/B	-/A	/A	B	-/B	B	/A	-/A	-B	/B	-B	-/B	1	
$\chi_{23}^{(10)}$	A	-A	A	-A	-A	A	/A	-/A	-/A	/A	A	-/B	/B	/A	-A	/A	/B	-/B	-/A	A	-/A	-A	1	
$\chi_{23}^{(11)}$	/A	-/A	/A	-/A	-/A	/A	A	-A	-A	A	/A	-B	B	A	-/A	A	B	-B	-A	/A	-A	-/A	1	
$\chi_{23}^{(12)}$	B	-B	B	-B	-B	B	/B	-/B	-/B	/B	B	-A	A	/B	-B	/B	A	-A	-/B	B	-/B	-B	1	
$\chi_{23}^{(13)}$	/B	-/B	-/B	/B	/B	-/B	-B	B	B	-B	-/B	-/A	/A	B	/B	-B	/A	-/A	-B	/B	B	-/B	1	
$\chi_{23}^{(14)}$	A	-A	-A	A	A	-A	-/A	/A	/A	-/A	-A	-/B	/B	/A	A	-/A	/B	-/B	-/A	A	/A	-A	1	
$\chi_{23}^{(15)}$	/A	-/A	-/A	/A	/A	-/A	-A	A	A	-A	-/A	-B	B	A	/A	-A	B	-B	-A	/A	A	-/A	1	
$\chi_{23}^{(16)}$	B	-B	-B	B	B	-B	-/B	/B	/B	-/B	-B	-A	A	/B	B	-/B	A	-A	-/B	B	/B	-B	1	
$\chi_{23}^{(17)}$	-/B	-/B	-/B	-/B	/B	/B	-B	-B	B	B	-/B	/A	/A	B	/B	-B	-/A	-/A	-B	/B	B	-/B	-1	
$\chi_{23}^{(18)}$	-A	-A	-A	-A	A	A	-/A	-/A	/A	/A	-A	/B	/B	/A	A	-/A	-/B	-/B	-/A	A	/A	-A	-1	
$\chi_{23}^{(19)}$	-/A	-/A	-/A	-/A	/A	/A	-A	-A	A	A	-/A	B	B	A	/A	-A	-B	-B	-A	/A	A	-/A	-1	
$\chi_{23}^{(20)}$	-B	-B	-B	-B	B	B	-/B	-/B	/B	/B	-B	A	A	/B	B	-/B	-A	-A	-/B	B	/B	-B	-1	
$\chi_{23}^{(21)}$	-/B	-/B	/B	/B	-/B	-/B	B	B	-B	-B	/B	/A	/A	B	-/B	B	-/A	-/A	-B	/B	-B	-/B	-1	
$\chi_{23}^{(22)}$	-A	-A	A	A	-A	-A	/A	/A	-/A	-/A	A	/B	/B	/A	-A	/A	-/B	-/B	-/A	A	-/A	-A	-1	
$\chi_{23}^{(23)}$	-/A	-/A	/A	/A	-/A	-/A	A	A	-A	-A	/A	B	B	A	-/A	A	-B	-B	-A	/A	-A	-/A	-1	
$\chi_{23}^{(24)}$	-B	-B	B	B	-B	-B	/B	/B	-/B	-/B	B	A	A	/B	-B	/B	-A	-A	-/B	B	-/B	-B	-1	
$\chi_{23}^{(25)}$	B	-B	-B	B	-B	B	-/B	/B	-/B	/B	-B	A	-A	-/B	-B	-/B	A	-A	-/B	-B	-/B	-B	-1	
$\chi_{23}^{(26)}$	/A	-/A	-/A	/A	-/A	/A	-A	A	-A	A	-/A	B	-B	-A	-/A	-A	B	-B	-A	-/A	-A	-/A	-1	
$\chi_{23}^{(27)}$	A	-A	-A	A	-A	A	-/A	/A	-/A	/A	-A	/B	-/B	-/A	-A	-/A	/B	-/B	-/A	-A	-/A	-A	-1	
$\chi_{23}^{(28)}$	/B	-/B	-/B	/B	-/B	/B	-B	B	-B	B	-/B	/A	-/A	-B	-/B	-B	/A	-/A	-B	-/B	-B	-/B	-1	
$\chi_{23}^{(29)}$	B	-B	B	-B	B	-B	/B	-/B	/B	-/B	B	A	-A	-/B	B	/B	A	-A	-/B	-B	/B	-B	-1	
$\chi_{23}^{(30)}$	/A	-/A	/A	-/A	/A	-/A	A	-A	A	-A	/A	B	-B	-A	/A	A	B	-B	-A	-/A	A	-/A	-1	

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$\chi_{23}^{(31)}$	A	-A	A	-A	A	-A	/A	-/A	/A	-/A	A	/B	-/B	-/A	A	/A	/B	-/B	-/A	-A	/A	-A	/A	-A	-1					
$\chi_{23}^{(32)}$	/B	-/B	/B	-/B	/B	-/B	B	-B	B	-B	/B	/A	-/A	-B	/B	B	/A	-/A	-B	-/B	B	-/B	B	-/B	-1					
$\chi_{23}^{(33)}$	-B	-B	B	B	B	B	/B	/B	/B	/B	B	-A	-A	-/B	B	/B	-A	-A	-/B	-B	/B	-B	/B	-B	1					
$\chi_{23}^{(34)}$	-/A	-/A	/A	/A	/A	/A	A	A	A	A	/A	-B	-B	-A	/A	A	-B	-B	-A	-/A	A	-/A	A	-/A	1					
$\chi_{23}^{(35)}$	-A	-A	A	A	A	A	/A	/A	/A	/A	A	-/B	-/B	-/A	A	/A	-/B	-/B	-/A	-A	/A	-A	/A	-A	1					
$\chi_{23}^{(36)}$	-/B	-/B	/B	/B	/B	/B	B	B	B	B	/B	-/A	-/A	-B	/B	B	-/A	-/A	-B	-/B	B	-/B	B	-/B	1					
$\chi_{23}^{(37)}$	-B	-B	-B	-B	-B	-B	-/B	-/B	-/B	-/B	-B	-A	-A	-/B	-B	-/B	-A	-A	-/B	-B	-/B	-B	-/B	-B	1					
$\chi_{23}^{(38)}$	-/A	-/A	-/A	-/A	-/A	-/A	-A	-A	-A	-A	-/A	-B	-B	-A	-/A	-A	-B	-B	-A	-/A	-A	-/A	-A	-/A	1					
$\chi_{23}^{(39)}$	-A	-A	-A	-A	-A	-A	-/A	-/A	-/A	-/A	-A	-/B	-/B	-/A	-A	-/A	-/B	-/B	-/A	-A	-/A	-A	-/A	-A	1					
$\chi_{23}^{(40)}$	-/B	-/B	-/B	-/B	-/B	-/B	-B	-B	-B	-B	-/B	-/A	-/A	-B	-/B	-B	-/A	-/A	-B	-/B	-B	-/B	-B	-/B	1					
$\chi_{23}^{(41)}$	.	-1	1	.	-1	.	1	.	-1	.	-2	.	1	-2	2	-2	.	-1	2	-2	2	2	.	.	.				
$\chi_{23}^{(42)}$	.	-1	-1	.	1	.	-1	.	1	.	2	.	1	-2	-2	2	.	-1	2	-2	-2	2	.	.	.				
$\chi_{23}^{(43)}$	.	-1	-1	.	-1	.	-1	.	-1	.	2	.	-1	2	2	2	.	-1	2	2	2	2	.	.	.				
$\chi_{23}^{(44)}$	.	-1	1	.	1	.	1	.	1	.	-2	.	-1	2	-2	-2	.	-1	2	2	-2	2	.	.	.				
$\chi_{23}^{(45)}$	.	/B	-/B	.	/B	.	-B	.	B	.	/D	.	-/A	D	-/D	D	.	/A	-D	/D	-D	-/D	.	.	.				
$\chi_{23}^{(46)}$	.	A	-A	.	A	.	-/A	.	/A	.	C	.	-/B	/C	-C	/C	.	/B	-/C	C	-/C	-C	.	.	.				
$\chi_{23}^{(47)}$	.	/A	-/A	.	/A	.	-A	.	A	.	/C	.	-B	C	-/C	C	.	B	-C	/C	-C	-/C	.	.	.				
$\chi_{23}^{(48)}$	.	B	-B	.	B	.	-/B	.	/B	.	D	.	-A	/D	-D	/D	.	A	-/D	D	-/D	-D	.	.	.				
$\chi_{23}^{(49)}$	.	/B	/B	.	-/B	.	B	.	-B	.	-/D	.	-/A	D	/D	-D	.	/A	-D	/D	D	-/D	.	.	.				
$\chi_{23}^{(50)}$	.	A	A	.	-A	.	/A	.	-/A	.	-C	.	-/B	/C	C	-/C	.	/B	-/C	C	/C	-C	.	.	.				
$\chi_{23}^{(51)}$	.	/A	/A	.	-/A	.	A	.	-A	.	-/C	.	-B	C	/C	-C	.	B	-C	/C	C	-/C	.	.	.				
$\chi_{23}^{(52)}$	.	B	B	.	-B	.	/B	.	-/B	.	-D	.	-A	/D	D	-/D	.	A	-/D	D	/D	-D	.	.	.				
$\chi_{23}^{(53)}$	.	/B	/B	.	/B	.	B	.	B	.	-/D	.	/A	-D	-/D	-D	.	/A	-D	-/D	-D	-/D	.	.	.				
$\chi_{23}^{(54)}$	.	A	A	.	A	.	/A	.	/A	.	-C	.	/B	-/C	-C	-/C	.	/B	-/C	-C	-/C	-C	.	.	.				
$\chi_{23}^{(55)}$	.	/A	/A	.	/A	.	A	.	A	.	-/C	.	B	-C	-/C	-C	.	B	-C	-/C	-C	-/C	.	.	.				
$\chi_{23}^{(56)}$	.	B	B	.	B	.	/B	.	/B	.	-D	.	A	-/D	-D	-/D	.	A	-/D	-D	-/D	-D	.	.	.				
$\chi_{23}^{(57)}$	.	/B	-/B	.	-/B	.	-B	.	-B	.	/D	.	/A	-D	/D	D	.	/A	-D	-/D	D	-/D	.	.	.				
$\chi_{23}^{(58)}$.	A	-A	.	-A	.	-/A	.	-/A	.	C	.	/B	-/C	C	/C	.	/B	-/C	-C	/C	-C	.	.	.					
$\chi_{23}^{(59)}$.	/A	-/A	.	-/A	.	-A	.	-A	.	/C	.	B	-C	/C	C	.	B	-C	-/C	C	-/C	.	.	.					
$\chi_{23}^{(60)}$.	B	-B	.	-B	.	-/B	.	-/B	.	D	.	A	-/D	D	/D	.	A	-/D	-D	/D	-D	.	.	.					
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$\chi_{23}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1						
$\chi_{23}^{(2)}$	-1	-1	1	-1	1	-1	1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1						
$\chi_{23}^{(3)}$	-1	-1	1	-1	1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1						
$\chi_{23}^{(4)}$	-1	1	1	-1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1						
$\chi_{23}^{(5)}$	-1	1	1	-1	1	-1	-1	-1	-1	1	1	-1	1	-1	1	1	-1	-1	1	1	-1	-1	1	1						
$\chi_{23}^{(6)}$	1	-1	1	1	1	1	-1	1	-1	1	-1	1	-1	1	-1	1	1	1	1	1	1	1	1	1						
$\chi_{23}^{(7)}$	1	-1	1	1	1	1	-1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	-1	-1						
$\chi_{23}^{(8)}$	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1						
$\chi_{23}^{(9)}$	-1	-1	1	/A	-/A	-1	-A	A	-A	-A	A	A	A	-A	A	A	-A	-A	-A	-A	-A	-A	-A	-A						
$\chi_{23}^{(10)}$	-1	-1	1	/B	-/B	-1	-B	B	-B	-B	B	B	B	-B	B	B	-B	-B	-B	-B	-B	-B	-B	-B						
$\chi_{23}^{(11)}$	-1	-1	1	B	-B	-1	-/B	/B	-/B	-/B	/B	/B	/B	-/B	/B	/B	-/B	-/B	-/B	-/B	-/B	-/B	-/B	-/B						
$\chi_{23}^{(12)}$	-1	-1	1	A	-A	-1	-/A	/A	-/A	-/A	/A	/A	/A	-/A	/A	/A	-/A	-/A	-/A	-/A	-/A	-/A	-/A	-/A						
$\chi_{23}^{(13)}$	-1	-1	1	/A	-/A	-1	-A	-A	A	A	-A	-A	-A	-A	-A	-A	-A	-A	-A	-A	-A	-A	-A	-A						
$\chi_{23}^{(14)}$	-1	-1	1	/B	-/B	-1	-B	-B	B	B	-B	-B	B	B	-B	-B	B	B	-B	-B	B	B	B	B						
$\chi_{23}^{(15)}$	-1	-1	1	B	-B	-1	-/B	-/B	/B	/B	-/B	-/B	/B	/B	-/B	-/B	/B	/B	-/B	-/B	/B	/B	/B	/B						

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$\chi_{23}^{(16)}$	-1	-1	1	A	-A	-1	-/A	-/A	/A	/A	-/A	-/A	/A
$\chi_{23}^{(17)}$	-1	1	1	/A	-/A	-1	A	-A	-A	A	A	-A	A
$\chi_{23}^{(18)}$	-1	1	1	/B	-/B	-1	B	-B	-B	B	B	-B	B
$\chi_{23}^{(19)}$	-1	1	1	B	-B	-1	/B	-/B	-/B	/B	/B	-/B	/B
$\chi_{23}^{(20)}$	-1	1	1	A	-A	-1	/A	-/A	-/A	/A	/A	-/A	/A
$\chi_{23}^{(21)}$	-1	1	1	/A	-/A	-1	A	A	A	-A	-A	A	-A
$\chi_{23}^{(22)}$	-1	1	1	/B	-/B	-1	B	B	B	-B	-B	B	-B
$\chi_{23}^{(23)}$	-1	1	1	B	-B	-1	/B	/B	/B	-/B	-/B	/B	-/B
$\chi_{23}^{(24)}$	-1	1	1	A	-A	-1	/A	/A	/A	-/A	-/A	/A	-/A
$\chi_{23}^{(25)}$	1	-1	1	-A	-A	1	/A	-/A	/A	-/A	/A	-/A	-/A
$\chi_{23}^{(26)}$	1	-1	1	-B	-B	1	/B	-/B	/B	-/B	/B	-/B	-/B
$\chi_{23}^{(27)}$	1	-1	1	-/B	-/B	1	B	-B	B	-B	B	-B	-B
$\chi_{23}^{(28)}$	1	-1	1	-/A	-/A	1	A	-A	A	-A	A	-A	-A
$\chi_{23}^{(29)}$	1	-1	1	-A	-A	1	/A	/A	-/A	/A	-/A	/A	/A
$\chi_{23}^{(30)}$	1	-1	1	-B	-B	1	/B	/B	-/B	/B	-/B	/B	/B
$\chi_{23}^{(31)}$	1	-1	1	-/B	-/B	1	B	B	-B	B	-B	B	B
$\chi_{23}^{(32)}$	1	-1	1	-/A	-/A	1	A	A	-A	A	-A	A	A
$\chi_{23}^{(33)}$	1	1	1	-A	-A	1	-/A	/A	/A	/A	/A	/A	/A
$\chi_{23}^{(34)}$	1	1	1	-B	-B	1	-/B	/B	/B	/B	/B	/B	/B
$\chi_{23}^{(35)}$	1	1	1	-/B	-/B	1	-B	B	B	B	B	B	B
$\chi_{23}^{(36)}$	1	1	1	-/A	-/A	1	-A	A	A	A	A	A	A
$\chi_{23}^{(37)}$	1	1	1	-A	-A	1	-/A	-/A	-/A	-/A	-/A	-/A	-/A
$\chi_{23}^{(38)}$	1	1	1	-B	-B	1	-/B	-/B	-/B	-/B	-/B	-/B	-/B
$\chi_{23}^{(39)}$	1	1	1	-/B	-/B	1	-B	-B	-B	-B	-B	-B	-B
$\chi_{23}^{(40)}$	1	1	1	-/A	-/A	1	-A	-A	-A	-A	-A	-A	-A
$\chi_{23}^{(41)}$	1	.	-1	-2	2	-2	.	1	.	-1	.	-2	2
$\chi_{23}^{(42)}$	1	.	-1	-2	2	-2	.	-1	.	1	.	2	-2
$\chi_{23}^{(43)}$	-1	.	-1	2	2	2	.	-1	.	-1	.	2	2
$\chi_{23}^{(44)}$	-1	.	-1	2	2	2	.	1	.	1	.	-2	-2
$\chi_{23}^{(45)}$	1	.	-1	/C	-/C	-2	.	-A	.	A	.	C	-C
$\chi_{23}^{(46)}$	1	.	-1	/D	-/D	-2	.	-B	.	B	.	D	-D
$\chi_{23}^{(47)}$	1	.	-1	D	-D	-2	.	-/B	.	/B	.	/D	-/D
$\chi_{23}^{(48)}$	1	.	-1	C	-C	-2	.	-/A	.	/A	.	/C	-/C
$\chi_{23}^{(49)}$	1	.	-1	/C	-/C	-2	.	A	.	-A	.	-C	C
$\chi_{23}^{(50)}$	1	.	-1	/D	-/D	-2	.	B	.	-B	.	-D	D
$\chi_{23}^{(51)}$	1	.	-1	D	-D	-2	.	/B	.	-/B	.	-/D	/D
$\chi_{23}^{(52)}$	1	.	-1	C	-C	-2	.	/A	.	-/A	.	-/C	/C
$\chi_{23}^{(53)}$	-1	.	-1	-/C	-/C	2	.	A	.	A	.	-C	-C
$\chi_{23}^{(54)}$	-1	.	-1	-/D	-/D	2	.	B	.	B	.	-D	-D
$\chi_{23}^{(55)}$	-1	.	-1	-D	-D	2	.	/B	.	/B	.	-/D	-/D
$\chi_{23}^{(56)}$	-1	.	-1	-C	-C	2	.	/A	.	/A	.	-/C	-/C
$\chi_{23}^{(57)}$	-1	.	-1	-/C	-/C	2	.	-A	.	-A	.	C	C
$\chi_{23}^{(58)}$	-1	.	-1	-/D	-/D	2	.	-B	.	-B	.	D	D
$\chi_{23}^{(59)}$	-1	.	-1	-D	-D	2	.	-/B	.	-/B	.	/D	/D
$\chi_{23}^{(60)}$	-1	.	-1	-C	-C	2	.	-/A	.	-/A	.	/C	/C

where $A = -E(5)^3, B = -E(5), C = -2^*E(5)^3, D = -2^*E(5)$.

The generators of $G^{s_{24}}$ are:

$$\begin{pmatrix} -1 & 0 & 1 & 0 & -1 & 1 & -1 & 0 \\ 0 & -1 & 1 & 0 & -1 & 1 & -1 & 0 \\ 0 & 0 & 1 & 0 & -2 & 2 & -2 & 0 \\ 0 & 0 & 2 & -1 & -2 & 2 & -2 & 0 \\ 0 & 0 & 1 & 0 & -2 & 1 & -1 & 0 \\ 0 & 0 & 1 & 0 & -1 & 0 & -1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & -1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 1 & 0 & 0 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix},$$

[illegible]

$$\begin{pmatrix} 1 & 1 & 1 & -2 & 1 & 0 & -1 & 0 \\ 1 & 2 & 1 & -3 & 2 & 0 & -2 & 1 \\ 2 & 2 & 2 & -4 & 2 & 0 & -2 & 1 \\ 2 & 3 & 3 & -6 & 4 & -1 & -3 & 2 \\ 2 & 2 & 2 & -5 & 4 & -1 & -2 & 1 \\ 2 & 1 & 1 & -3 & 3 & -1 & -2 & 1 \\ 2 & 1 & 0 & -2 & 2 & -1 & -1 & 1 \\ 1 & 1 & 0 & -1 & 1 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 0 & 2 & -2 & 1 & 0 & 0 \\ -1 & -2 & 0 & 3 & -3 & 1 & 1 & -1 \\ -2 & -2 & 0 & 4 & -4 & 2 & 0 & -1 \\ -2 & -3 & -1 & 6 & -6 & 3 & 1 & -2 \\ -2 & -2 & -1 & 5 & -5 & 2 & 1 & -1 \\ -2 & -1 & 0 & 3 & -4 & 2 & 1 & -1 \\ -2 & -1 & 0 & 2 & -2 & 1 & 1 & -1 \\ -1 & -1 & 0 & 1 & -1 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 1 & 0 & -2 & 2 & -1 & 0 & 0 \\ 1 & 2 & 0 & -3 & 3 & -1 & -1 & 1 \\ 2 & 2 & 0 & -4 & 4 & -2 & 0 & 1 \\ 2 & 3 & 1 & -6 & 6 & -3 & -1 & 2 \\ 2 & 2 & 1 & -5 & 5 & -2 & -1 & 1 \\ 2 & 1 & 0 & -3 & 4 & -2 & -1 & 1 \\ 2 & 1 & 0 & -2 & 2 & -1 & -1 & 1 \\ 1 & 1 & 0 & -1 & 1 & -1 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} -1 & -1 & -1 & 2 & -1 & 0 & 1 & 0 \\ -1 & -2 & -1 & 3 & -2 & 0 & 2 & -1 \\ -2 & -2 & -2 & 4 & -2 & 0 & 2 & -1 \\ -2 & -3 & -3 & 6 & -4 & 1 & 3 & -2 \\ -2 & -2 & -2 & 5 & -4 & 1 & 2 & -1 \\ -2 & -1 & -1 & 3 & -3 & 1 & 2 & -1 \\ -2 & -1 & 0 & 2 & -2 & 1 & 1 & -1 \\ -1 & -1 & 0 & 1 & -1 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & -1 & 1 & 0 & -1 & 0 & 0 & 1 \\ 0 & -2 & 2 & 0 & -1 & 0 & 0 & 2 \\ 1 & -2 & 3 & -1 & -1 & 0 & 0 & 2 \\ 1 & -3 & 4 & -1 & -2 & 0 & 1 & 3 \\ 1 & -3 & 3 & -1 & -1 & 0 & 1 & 2 \\ 1 & -2 & 2 & -1 & -1 & 1 & 0 & 2 \\ 1 & -1 & 1 & -1 & 0 & 0 & 0 & 2 \\ 1 & -1 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} -1 & 1 & 0 & 0 & 0 & 1 & -1 & -1 \\ 0 & 2 & -1 & 0 & 0 & 1 & -1 & -2 \\ -1 & 2 & -1 & 1 & -1 & 2 & -2 & -2 \\ -1 & 3 & -2 & 1 & 0 & 2 & -3 & -3 \\ -1 & 3 & -2 & 1 & 0 & 1 & -2 & -2 \\ -1 & 2 & -1 & 1 & 0 & 0 & -1 & -2 \\ -1 & 1 & -1 & 1 & 0 & 0 & 0 & -2 \\ -1 & 1 & 0 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \\
\begin{pmatrix} 1 & -1 & 0 & 0 & 0 & -1 & 1 & 1 \\ 0 & -2 & 1 & 0 & 0 & -1 & 1 & 2 \\ 1 & -2 & 1 & -1 & 1 & -2 & 2 & 2 \\ 1 & -3 & 2 & -1 & 0 & -2 & 3 & 3 \\ 1 & -3 & 2 & -1 & 0 & -1 & 2 & 2 \\ 1 & -2 & 1 & -1 & 0 & 0 & 1 & 2 \\ 1 & -1 & 1 & -1 & 0 & 0 & 0 & 2 \\ 1 & -1 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} -1 & 1 & -1 & 0 & 1 & 0 & 0 & -1 \\ 0 & 2 & -2 & 0 & 1 & 0 & 0 & -2 \\ -1 & 2 & -3 & 1 & 1 & 0 & 0 & -2 \\ -1 & 3 & -4 & 1 & 2 & 0 & -1 & -3 \\ -1 & 3 & -3 & 1 & 1 & 0 & -1 & -2 \\ -1 & 2 & -2 & 1 & 1 & -1 & 0 & -2 \\ -1 & 1 & -1 & 1 & 0 & 0 & 0 & -2 \\ -1 & 1 & 0 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 1 & 1 & -1 & -1 & 1 & 0 \\ 0 & -3 & 1 & 2 & -1 & -1 & 1 & 0 \\ 0 & -3 & 2 & 2 & -1 & -2 & 1 & 0 \\ 1 & -5 & 2 & 3 & -1 & -3 & 2 & 0 \\ 0 & -4 & 2 & 2 & 0 & -3 & 2 & 0 \\ 0 & -3 & 2 & 1 & 0 & -2 & 1 & 1 \\ 0 & -2 & 1 & 1 & 0 & -2 & 1 & 1 \\ 0 & -1 & 0 & 1 & 0 & -1 & 0 & 1 \end{pmatrix}, \\
\begin{pmatrix} 0 & 1 & 0 & -1 & 0 & 2 & -2 & 0 \\ 0 & 3 & 0 & -2 & 0 & 2 & -2 & 0 \\ 0 & 3 & 0 & -2 & -1 & 4 & -3 & 0 \\ -1 & 5 & 0 & -3 & -1 & 5 & -4 & 0 \\ 0 & 4 & -1 & -2 & -1 & 4 & -3 & 0 \\ 0 & 3 & -1 & -1 & -1 & 3 & -2 & -1 \\ 0 & 2 & -1 & -1 & 0 & 2 & -1 & -1 \\ 0 & 1 & 0 & -1 & 0 & 1 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 0 & 1 & 0 & -2 & 2 & 0 \\ 0 & -3 & 0 & 2 & 0 & -2 & 2 & 0 \\ 0 & -3 & 0 & 2 & 1 & -4 & 3 & 0 \\ 1 & -5 & 0 & 3 & 1 & -5 & 4 & 0 \\ 0 & -4 & 1 & 2 & 1 & -4 & 3 & 0 \\ 0 & -3 & 1 & 1 & 1 & -3 & 2 & 1 \\ 0 & -2 & 1 & 1 & 0 & -2 & 1 & 1 \\ 0 & -1 & 0 & 1 & 0 & -1 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 1 & -1 & -1 & 1 & 1 & -1 & 0 \\ 0 & 3 & -1 & -2 & 1 & 1 & -1 & 0 \\ 0 & 3 & -2 & -2 & 1 & 2 & -1 & 0 \\ -1 & 5 & -2 & -3 & 1 & 3 & -2 & 0 \\ 0 & 4 & -2 & -2 & 0 & 3 & -2 & 0 \\ 0 & 3 & -2 & -1 & 0 & 2 & -1 & -1 \\ 0 & 2 & -1 & -1 & 0 & 2 & -1 & -1 \\ 0 & 1 & 0 & -1 & 0 & 1 & 0 & -1 \end{pmatrix}.
\end{pmatrix}$$

The character table of $G^{s_{24}}$:

	10										20									
$\chi_{24}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{24}^{(2)}$	1	-1	-1	1	1	-1	-1	1	-1	1	1	-1	-1	1	1	-1	-1	1	-1	1
$\chi_{24}^{(3)}$	1	-1	1	-1	1	-1	1	-1	-1	1	-1	1	-1	1	1	-1	1	-1	-1	1
$\chi_{24}^{(4)}$	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1
$\chi_{24}^{(5)}$	7	7	7	7	1	1	1	1	-2	-2	-2	-2	.	.	.	.	2	2	2	-1
$\chi_{24}^{(6)}$	7	7	-7	-7	1	1	-1	-1	-2	-2	2	2	.	.	.	.	2	2	-2	-1
$\chi_{24}^{(7)}$	7	-7	7	-7	1	-1	1	-1	2	-2	2	-2	.	.	.	.	2	-2	2	-1
$\chi_{24}^{(8)}$	7	-7	-7	7	1	-1	-1	1	2	-2	-2	2	.	.	.	.	2	-2	-2	-1
$\chi_{24}^{(9)}$	15	15	15	15	.	.	.	.	-3	-3	-3	-3	-1	-1	-1	-1	1	1	1	7
$\chi_{24}^{(10)}$	15	15	-15	-15	.	.	.	.	-3	-3	3	3	-1	-1	1	1	1	1	-1	-1
$\chi_{24}^{(11)}$	15	-15	15	-15	.	.	.	.	3	-3	3	-3	1	-1	1	-1	1	-1	1	-1
$\chi_{24}^{(12)}$	15	-15	-15	15	.	.	.	.	3	-3	-3	3	1	-1	-1	1	1	-1	-1	-1
$\chi_{24}^{(13)}$	21	21	21	21	.	.	.	.	3	3	3	3	1	1	1	-1	-1	-1	-1	5
$\chi_{24}^{(14)}$	21	21	-21	-21	.	.	.	.	3	3	-3	-3	1	1	-1	-1	-1	-1	1	5
$\chi_{24}^{(15)}$	21	-21	21	-21	.	.	.	.	-3	3	-3	3	-1	1	-1	1	-1	1	-1	-5
$\chi_{24}^{(16)}$	21	-21	-21	21	.	.	.	.	-3	3	3	-3	-1	1	1	-1	-1	1	-1	-5
$\chi_{24}^{(17)}$	21	21	21	21	.	.	.	.	3	3	3	3	-1	-1	-1	-1	3	3	3	-3
$\chi_{24}^{(18)}$	21	21	-21	-21	.	.	.	.	3	3	-3	-3	-1	-1	1	1	3	3	-3	-3
$\chi_{24}^{(19)}$	21	-21	21	-21	.	.	.	.	-3	3	-3	3	1	-1	1	-1	3	-3	3	-3
$\chi_{24}^{(20)}$	21	-21	-21	21	.	.	.	.	-3	3	3	-3	1	-1	-1	1	3	-3	-3	-3
$\chi_{24}^{(21)}$	27	27	27	27	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	3
$\chi_{24}^{(22)}$	27	27	-27	-27	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-3
$\chi_{24}^{(23)}$	27	-27	27	-27	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	3
$\chi_{24}^{(24)}$	27	-27	-27	27	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-3
$\chi_{24}^{(25)}$	35	35	35	35	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	3	3	3	3
$\chi_{24}^{(26)}$	35	35	35	35	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	11
$\chi_{24}^{(27)}$	35	35	-35	-35	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	3	3	-3	-3
$\chi_{24}^{(28)}$	35	35	-35	-35	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	11
$\chi_{24}^{(29)}$	35	-35	35	-35	-1	1	-1	1	1	-1	1	-1	1	-1	1	3	-3	3	-3	-3
$\chi_{24}^{(30)}$	35	-35	35	-35	-1	1	-1	1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-11
$\chi_{24}^{(31)}$	35	-35	-35	35	-1	1	1	-1	1	-1	-1	1	-1	1	1	-1	3	-3	-3	3
$\chi_{24}^{(32)}$	35	-35	-35	35	-1	1	1	-1	1	-1	-1	1	1	-1	-1	1	1	-1	-11	11
$\chi_{24}^{(33)}$	56	56	56	56	-1	-1	-1	-1	2	2	2	2	.	.	.	.	-2	-2	-2	-8
$\chi_{24}^{(34)}$	56	56	-56	-56	-1	-1	1	1	2	2	-2	-2	.	.	.	.	-2	-2	2	-8
$\chi_{24}^{(35)}$	56	-56	56	-56	-1	1	-1	1	-2	2	-2	2	.	.	.	.	-2	2	-2	8
$\chi_{24}^{(36)}$	56	-56	-56	56	-1	1	1	-1	-2	2	2	-2	.	.	.	.	-2	2	2	-8
$\chi_{24}^{(37)}$	70	70	70	70	1	1	1	1	7	7	7	7	-1	-1	-1	-1	-1	-1	-1	-10
$\chi_{24}^{(38)}$	70	70	-70	-70	1	1	-1	-1	7	7	-7	-7	-1	-1	1	1	-1	-1	1	-10
$\chi_{24}^{(39)}$	70	-70	70	-70	1	-1	1	-1	-7	7	-7	7	1	-1	1	-1	-1	1	-1	10
$\chi_{24}^{(40)}$	70	-70	-70	70	1	-1	-1	1	-7	7	7	-7	1	-1	-1	1	-1	1	-1	-10
$\chi_{24}^{(41)}$	84	84	84	84	.	.	.	.	3	3	3	3	1	1	1	1	-1	-1	-1	20
$\chi_{24}^{(42)}$	84	84	-84	-84	.	.	.	.	3	3	-3	-3	1	1	-1	-1	-1	-1	1	-20
$\chi_{24}^{(43)}$	84	-84	84	-84	.	.	.	.	-3	3	-3	3	-1	1	-1	1	-1	1	-1	-20
$\chi_{24}^{(44)}$	84	-84	-84	84	.	.	.	.	-3	3	3	-3	-1	1	-1	-1	1	1	-1	20
$\chi_{24}^{(45)}$	105	105	105	105	.	.	.	.	-3	-3	-3	-3	-1	-1	-1	-1	1	1	1	1

	10												20										
$\chi_{24}^{(46)}$	105	105	105	105	.	.	.	.	6	6	6	6	.	.	.	.	2	2	2	2	17	17	17
$\chi_{24}^{(47)}$	105	105	105	105	.	.	.	.	6	6	6	6	.	.	.	.	2	2	2	2	-7	-7	-7
$\chi_{24}^{(48)}$	105	105	-105	-105	.	.	.	.	-3	-3	3	3	-1	-1	1	1	1	1	-1	-1	1	1	-1
$\chi_{24}^{(49)}$	105	105	-105	-105	.	.	.	.	6	6	-6	-6	.	.	.	.	2	2	-2	-2	17	17	-17
$\chi_{24}^{(50)}$	105	105	-105	-105	.	.	.	.	6	6	-6	-6	.	.	.	.	2	2	-2	-2	-7	-7	7
$\chi_{24}^{(51)}$	105	-105	105	-105	.	.	.	.	-6	6	-6	6	.	.	.	.	2	-2	2	-2	-17	17	-17
$\chi_{24}^{(52)}$	105	-105	105	-105	.	.	.	.	-6	6	-6	6	.	.	.	.	2	-2	2	-2	7	-7	7
$\chi_{24}^{(53)}$	105	-105	105	-105	.	.	.	.	3	-3	3	-3	1	-1	1	-1	1	-1	1	-1	-1	1	-1
$\chi_{24}^{(54)}$	105	-105	-105	105	.	.	.	.	-6	6	6	-6	.	.	.	.	2	-2	-2	2	-17	17	17
$\chi_{24}^{(55)}$	105	-105	-105	105	.	.	.	.	-6	6	6	-6	.	.	.	.	2	-2	-2	2	7	-7	-7
$\chi_{24}^{(56)}$	105	-105	-105	105	.	.	.	.	3	-3	-3	3	1	-1	-1	1	1	-1	-1	1	-1	1	1
$\chi_{24}^{(57)}$	120	120	120	120	.	.	.	.	-6	-6	-6	-6	.	.	.	.	-2	-2	-2	-2	-8	-8	-8
$\chi_{24}^{(58)}$	120	120	-120	-120	.	.	.	.	-6	-6	6	6	.	.	.	.	-2	-2	2	2	-8	-8	8
$\chi_{24}^{(59)}$	120	-120	120	-120	.	.	.	.	6	-6	6	-6	.	.	.	.	-2	2	-2	2	8	-8	8
$\chi_{24}^{(60)}$	120	-120	-120	120	.	.	.	.	6	-6	-6	6	.	.	.	.	-2	2	2	-2	8	-8	-8
$\chi_{24}^{(61)}$	168	168	168	168	.	.	.	.	6	6	6	6	.	.	.	.	2	2	2	2	8	8	8
$\chi_{24}^{(62)}$	168	168	-168	-168	.	.	.	.	6	6	-6	-6	.	.	.	.	2	2	-2	-2	8	8	-8
$\chi_{24}^{(63)}$	168	-168	168	-168	.	.	.	.	-6	6	-6	6	.	.	.	.	2	-2	2	-2	-8	8	-8
$\chi_{24}^{(64)}$	168	-168	-168	168	.	.	.	.	-6	6	6	-6	.	.	.	.	2	-2	-2	2	-8	8	8
$\chi_{24}^{(65)}$	189	189	189	189	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-3	-3	-3
$\chi_{24}^{(66)}$	189	189	189	189	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	21	21	21
$\chi_{24}^{(67)}$	189	189	-189	-189	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-3	-3	3
$\chi_{24}^{(68)}$	189	189	-189	-189	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	21	21	-21
$\chi_{24}^{(69)}$	189	-189	189	-189	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-21	21	-21
$\chi_{24}^{(70)}$	189	-189	189	-189	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	3	-3	3
$\chi_{24}^{(71)}$	189	-189	-189	189	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-21	21	21
$\chi_{24}^{(72)}$	189	-189	-189	189	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	3	-3	-3
$\chi_{24}^{(73)}$	189	189	189	189	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-3	-3	-3
$\chi_{24}^{(74)}$	189	189	-189	-189	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-3	-3	3
$\chi_{24}^{(75)}$	189	-189	189	-189	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	3	-3	3
$\chi_{24}^{(76)}$	189	-189	-189	189	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	3	-3	-3
$\chi_{24}^{(77)}$	210	210	210	210	.	.	.	.	-6	-6	-6	-6	.	.	.	.	-2	-2	-2	-2	-14	-14	-14
$\chi_{24}^{(78)}$	210	210	210	210	.	.	.	.	3	3	3	3	1	1	1	1	-1	-1	-1	-1	2	2	2
$\chi_{24}^{(79)}$	210	210	-210	-210	.	.	.	.	-6	-6	6	6	.	.	.	.	-2	-2	2	2	-14	-14	14
$\chi_{24}^{(80)}$	210	210	-210	-210	.	.	.	.	3	3	-3	-3	1	1	-1	-1	-1	-1	1	1	2	2	-2
$\chi_{24}^{(81)}$	210	-210	210	-210	.	.	.	.	6	-6	6	-6	.	.	.	.	-2	2	-2	2	14	-14	14
$\chi_{24}^{(82)}$	210	-210	210	-210	.	.	.	.	-3	3	-3	3	-1	1	-1	1	-1	1	-1	1	-2	2	-2
$\chi_{24}^{(83)}$	210	-210	-210	210	.	.	.	.	6	-6	-6	6	.	.	.	.	-2	2	2	-2	14	-14	-14
$\chi_{24}^{(84)}$	210	-210	-210	210	.	.	.	.	-3	3	3	-3	-1	1	1	-1	-1	1	1	-1	-2	2	2
$\chi_{24}^{(85)}$	216	216	216	216	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	24	24	24
$\chi_{24}^{(86)}$	216	216	-216	-216	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	24	24	-24
$\chi_{24}^{(87)}$	216	-216	216	-216	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-24	24	-24
$\chi_{24}^{(88)}$	216	-216	-216	216	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-24	24	24
$\chi_{24}^{(89)}$	280	280	280	280	1	1	1	1	-8	-8	-8	-8	.	.	.	.	.	.	.	.	24	24	24
$\chi_{24}^{(90)}$	280	280	-280	-280	1	1	-1	-1	-8	-8	8	8	.	.	.	.	.	.	.	.	24	24	-24

	10												20											
$\chi_{24}^{(91)}$	280	-280	280	-280	1	-1	1	-1	8	-8	8	-8	.	.	.	.	.	.	.	.	-24	24	-24
$\chi_{24}^{(92)}$	280	-280	-280	280	1	-1	-1	1	8	-8	-8	8	.	.	.	.	.	.	.	.	-24	24	24
$\chi_{24}^{(93)}$	280	280	280	280	1	1	1	1	10	10	10	10	.	.	.	.	-2	-2	-2	-2	-8	-8	-8
$\chi_{24}^{(94)}$	280	280	-280	-280	1	1	-1	-1	10	10	-10	-10	.	.	.	.	-2	-2	2	2	-8	-8	8
$\chi_{24}^{(95)}$	280	-280	280	-280	1	-1	1	-1	-10	10	-10	10	.	.	.	.	-2	2	-2	2	8	-8	8
$\chi_{24}^{(96)}$	280	-280	-280	280	1	-1	-1	1	-10	10	10	-10	.	.	.	.	-2	2	2	-2	8	-8	-8
$\chi_{24}^{(97)}$	315	315	315	315	.	.	.	.	-9	-9	-9	-9	1	1	1	1	3	3	3	3	-21	-21	-21
$\chi_{24}^{(98)}$	315	315	-315	-315	.	.	.	.	-9	-9	9	9	1	1	-1	-1	3	3	-3	-3	-21	-21	21
$\chi_{24}^{(99)}$	315	-315	315	-315	.	.	.	.	9	-9	9	-9	-1	1	-1	1	3	-3	3	-3	21	-21	21
$\chi_{24}^{(100)}$	315	-315	-315	315	.	.	.	.	9	-9	-9	9	-1	1	1	-1	3	-3	-3	3	21	-21	-21
$\chi_{24}^{(101)}$	336	336	336	336	.	.	.	.	-6	-6	-6	-6	.	.	.	.	-2	-2	-2	-2	16	16	16
$\chi_{24}^{(102)}$	336	336	-336	-336	.	.	.	.	-6	-6	6	6	.	.	.	.	-2	-2	2	2	16	16	-16
$\chi_{24}^{(103)}$	336	-336	336	-336	.	.	.	.	6	-6	6	-6	.	.	.	.	-2	2	-2	2	-16	16	-16
$\chi_{24}^{(104)}$	336	-336	-336	336	.	.	.	.	6	-6	-6	6	.	.	.	.	-2	2	2	-2	-16	16	16
$\chi_{24}^{(105)}$	378	378	378	378	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-6	-6	-6
$\chi_{24}^{(106)}$	378	378	-378	-378	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-6	-6	6
$\chi_{24}^{(107)}$	378	-378	378	-378	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	6	-6	6
$\chi_{24}^{(108)}$	378	-378	-378	378	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	6	-6	-6
$\chi_{24}^{(109)}$	405	405	405	405	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-27	-27	-27
$\chi_{24}^{(110)}$	405	405	-405	-405	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-27	-27	27
$\chi_{24}^{(111)}$	405	-405	405	-405	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	27	-27	27
$\chi_{24}^{(112)}$	405	-405	-405	405	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	27	-27	-27
$\chi_{24}^{(113)}$	420	420	420	420	.	.	.	.	-3	-3	-3	-3	-1	-1	-1	-1	1	1	1	1	4	4	4
$\chi_{24}^{(114)}$	420	420	-420	-420	.	.	.	.	-3	-3	3	3	-1	-1	1	1	1	1	-1	-1	4	4	-4
$\chi_{24}^{(115)}$	420	-420	420	-420	.	.	.	.	3	-3	3	-3	1	-1	1	-1	1	-1	1	-1	-4	4	-4
$\chi_{24}^{(116)}$	420	-420	-420	420	.	.	.	.	3	-3	-3	3	1	-1	-1	1	1	-1	-1	1	-4	4	4
$\chi_{24}^{(117)}$	512	512	512	512	-1	-1	-1	-1	8	8	8	8	.	.	.	.	.	.	.	.	.	.	.
$\chi_{24}^{(118)}$	512	512	-512	-512	-1	-1	1	1	8	8	-8	-8	
$\chi_{24}^{(119)}$	512	-512	512	-512	-1	1	-1	1	-8	8	-8	8	
$\chi_{24}^{(120)}$	512	-512	-512	512	-1	1	1	-1	-8	8	8	-8	

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$\chi_{24}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{24}^{(2)}$	-1	1	-1	-1	1	-1	1	1	-1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1
$\chi_{24}^{(3)}$	1	1	-1	1	-1	-1	1	-1	1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1
$\chi_{24}^{(4)}$	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1
$\chi_{24}^{(5)}$	-1	3	3	3	3	-1	-1	-1	-1	2	2	2	2	4	4	4	4	-1	-1	-1	-1	.	.	.
$\chi_{24}^{(6)}$	1	3	3	-3	-3	-1	-1	1	1	2	2	-2	-2	4	4	-4	-4	-1	-1	1	1	.	.	.
$\chi_{24}^{(7)}$	-1	3	-3	3	-3	1	-1	1	-1	2	-2	2	-2	4	-4	4	-4	1	-1	1	-1	.	.	.
$\chi_{24}^{(8)}$	1	3	-3	-3	3	1	-1	-1	1	2	-2	-2	2	4	-4	-4	4	1	-1	-1	1	.	.	.
$\chi_{24}^{(9)}$	7	-1	-1	-1	-1	.	.	.	.	.	.	.	.	.	.	.	1	1	1	1	1	1	1	1
$\chi_{24}^{(10)}$	-7	-1	-1	1	1	.	.	.	.	.	.	.	.	.	.	.	1	1	-1	-1	1	1	-1	-1
$\chi_{24}^{(11)}$	7	-1	1	-1	1	.	.	.	.	.	.	.	.	.	.	.	-1	1	-1	1	-1	1	-1	1
$\chi_{24}^{(12)}$	-7	-1	1	1	-1	.	.	.	.	.	.	.	.	.	.	.	-1	1	1	-1	-1	1	1	-1
$\chi_{24}^{(13)}$	5	1	1	1	1	1	1	1	1	1	1	1	1	6	6	6	6	-1	-1	-1	-1	.	.	.
$\chi_{24}^{(14)}$	-5	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	6	6	-6	-6	-1	-1	1	1	.	.	.
$\chi_{24}^{(15)}$	5	1	-1	1	-1	-1	1	-1	1	1	-1	1	-1	6	-6	6	-6	1	-1	1	-1	.	.	.
$\chi_{24}^{(16)}$	-5	1	-1	-1	1	-1	1	1	-1	1	-1	-1	1	6	-6	-6	6	1	-1	-1	1	.	.	.
$\chi_{24}^{(17)}$	-3	5	5	5	5	1	1	1	1	1	1	1	1	6	6	6	6	-1	-1	-1	-1	.	.	.
$\chi_{24}^{(18)}$	3	5	5	-5	-5	1	1	-1	-1	1	1	-1	-1	6	6	-6	-6	-1	-1	1	1	.	.	.
$\chi_{24}^{(19)}$	-3	5	-5	5	-5	-1	1	-1	1	1	-1	1	-1	6	-6	6	-6	1	-1	1	-1	.	.	.
$\chi_{24}^{(20)}$	3	5	-5	-5	5	-1	1	1	-1	1	-1	-1	1	6	-6	-6	6	1	-1	-1	1	.	.	.
$\chi_{24}^{(21)}$	3	3	3	3	3	-1	-1	-1	-1	2	2	2	2	9	9	9	9	1	1	1	1	-1	-1	-1
$\chi_{24}^{(22)}$	-3	3	3	-3	-3	-1	-1	1	1	2	2	-2	-2	9	9	-9	-9	1	1	-1	-1	-1	-1	1
$\chi_{24}^{(23)}$	3	3	-3	3	-3	1	-1	1	-1	2	-2	2	-2	9	-9	9	-9	-1	1	-1	1	1	-1	-1
$\chi_{24}^{(24)}$	-3	3	-3	-3	3	1	-1	-1	1	2	-2	-2	2	9	-9	-9	9	-1	1	1	-1	1	-1	1
$\chi_{24}^{(25)}$	3	7	7	7	7	.	.	.	.	.	.	.	.	5	5	5	5	1	1	1	1	.	.	.
$\chi_{24}^{(26)}$	11	-1	-1	-1	-1	.	.	.	.	.	.	.	.	5	5	5	5	-1	-1	-1	-1	.	.	.
$\chi_{24}^{(27)}$	-3	7	7	-7	-7	.	.	.	.	.	.	.	.	5	5	-5	-5	1	1	-1	-1	.	.	.
$\chi_{24}^{(28)}$	-11	-1	-1	1	1	.	.	.	.	.	.	.	.	5	5	-5	-5	-1	-1	1	1	.	.	.
$\chi_{24}^{(29)}$	3	7	-7	7	-7	.	.	.	.	.	.	.	.	5	-5	5	-5	-1	1	-1	1	.	.	.
$\chi_{24}^{(30)}$	11	-1	1	-1	1	.	.	.	.	.	.	.	.	5	-5	5	-5	1	-1	1	-1	.	.	.
$\chi_{24}^{(31)}$	-3	7	-7	-7	7	.	.	.	.	.	.	.	.	5	-5	-5	5	-1	1	1	-1	.	.	.
$\chi_{24}^{(32)}$	-11	-1	1	1	-1	.	.	.	.	.	.	.	.	5	-5	-5	5	1	-1	-1	1	.	.	.
$\chi_{24}^{(33)}$	-8	.	.	.	.	1	1	1	1	1	1	1	1	11	11	11	11	.	.	.	.	.	.	.
$\chi_{24}^{(34)}$	8	.	.	.	.	1	1	-1	-1	1	1	-1	-1	11	11	-11	-11	.	.	.	.	.	.	.
$\chi_{24}^{(35)}$	-8	.	.	.	.	-1	1	-1	1	1	-1	1	-1	11	-11	11	-11	.	.	.	.	.	.	.
$\chi_{24}^{(36)}$	8	.	.	.	.	-1	1	1	-1	1	-1	-1	1	11	-11	-11	11	.	.	.	.	.	.	.
$\chi_{24}^{(37)}$	-10	2	2	2	2	.	.	.	.	.	.	.	.	-5	-5	-5	-5	.	.	.	.	.	.	.
$\chi_{24}^{(38)}$	10	2	2	-2	-2	.	.	.	.	.	.	.	.	-5	-5	5	5	.	.	.	.	.	.	.
$\chi_{24}^{(39)}$	-10	2	-2	2	-2	.	.	.	.	.	.	.	.	-5	5	-5	5	.	.	.	.	.	.	.
$\chi_{24}^{(40)}$	10	2	-2	-2	2	.	.	.	.	.	.	.	.	-5	5	5	-5	.	.	.	.	.	.	.
$\chi_{24}^{(41)}$	20	4	4	4	4	-1	-1	-1	-1	-1	-1	-1	-1	-6	-6	-6	-6	.	.	.	.	.	.	.
$\chi_{24}^{(42)}$	-20	4	4	-4	-4	-1	-1	1	1	-1	-1	1	1	-6	-6	6	6	.	.	.	.	.	.	.
$\chi_{24}^{(43)}$	20	4	-4	4	-4	1	-1	1	-1	-1	1	-1	1	-6	6	-6	6
$\chi_{24}^{(44)}$	-20	4	-4	-4	4	1	-1	-1	1	-1	1	1	-1	-6	6	6	-6
$\chi_{24}^{(45)}$	1	5	5	5	5	15	15	15	15	1	1	1	1	.	.	.

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$\chi_{24}^{(46)}$	17	-3	-3	-3	-3	1	1	1	1	
$\chi_{24}^{(47)}$	-7	-3	-3	-3	-3	-1	-1	-1	-1	
$\chi_{24}^{(48)}$	-1	5	5	-5	-5	15	15	-15	-15	1	1	-1	-1	
$\chi_{24}^{(49)}$	-17	-3	-3	3	3	1	1	-1	-1	
$\chi_{24}^{(50)}$	7	-3	-3	3	3	.	.	.	.	.	.	.	.	.	.	.	-1	-1	1	1	.	.	.	.
$\chi_{24}^{(51)}$	17	-3	3	-3	3	.	.	.	.	.	.	.	.	.	.	.	-1	1	-1	1	.	.	.	.
$\chi_{24}^{(52)}$	-7	-3	3	-3	3	.	.	.	.	.	.	.	.	.	.	.	1	-1	1	-1	.	.	.	.
$\chi_{24}^{(53)}$	1	5	-5	5	-5	.	.	.	.	.	.	.	15	-15	15	-15	-1	1	-1	1	.	.	.	.
$\chi_{24}^{(54)}$	-17	-3	3	3	-3	.	.	.	.	.	.	.	.	.	.	.	-1	1	1	-1	.	.	.	.
$\chi_{24}^{(55)}$	7	-3	3	3	-3	.	.	.	.	.	.	.	.	.	.	.	1	-1	-1	1	.	.	.	.
$\chi_{24}^{(56)}$	-1	5	-5	-5	5	.	.	.	.	.	.	.	15	-15	-15	15	-1	1	1	-1	.	.	.	.
$\chi_{24}^{(57)}$	-8	.	.	.	.	.	.	.	.	.	.	.	15	15	15	15	.	.	.	.	1	1	1	1
$\chi_{24}^{(58)}$	8	.	.	.	.	.	.	.	.	.	.	.	15	15	-15	-15	.	.	.	.	1	1	-1	-1
$\chi_{24}^{(59)}$	-8	.	.	.	.	.	.	.	.	.	.	.	15	-15	15	-15	.	.	.	.	-1	1	-1	1
$\chi_{24}^{(60)}$	8	.	.	.	.	.	.	.	.	.	.	.	15	-15	-15	15	.	.	.	.	-1	1	1	-1
$\chi_{24}^{(61)}$	8	.	.	.	.	1	1	1	1	-2	-2	-2	-2	6	6	6	6	.	.	.	.	.	.	.
$\chi_{24}^{(62)}$	-8	.	.	.	.	1	1	-1	-1	-2	-2	2	2	6	6	-6	-6	.	.	.	.	.	.	.
$\chi_{24}^{(63)}$	8	.	.	.	.	-1	1	-1	1	-2	2	-2	2	6	-6	6	-6	.	.	.	.	.	.	.
$\chi_{24}^{(64)}$	-8	.	.	.	.	-1	1	1	-1	-2	2	2	-2	6	-6	-6	6	.	.	.	.	.	.	.
$\chi_{24}^{(65)}$	-3	-3	-3	-3	-3	-1	-1	-1	-1	-1	-1	-1	-1	9	9	9	9	1	1	1	1	.	.	.	
$\chi_{24}^{(66)}$	21	-3	-3	-3	-3	-1	-1	-1	-1	-1	-1	-1	-1	9	9	9	9	-1	-1	-1	-1	.	.	.	
$\chi_{24}^{(67)}$	3	-3	-3	3	3	-1	-1	1	1	-1	-1	1	1	9	9	-9	-9	1	1	-1	-1	.	.	.	
$\chi_{24}^{(68)}$	-21	-3	-3	3	3	-1	-1	1	1	-1	-1	1	1	9	9	-9	-9	-1	-1	1	1	.	.	.	
$\chi_{24}^{(69)}$	21	-3	3	-3	3	1	-1	1	-1	-1	1	-1	1	9	-9	9	-9	1	-1	1	-1	.	.	.	
$\chi_{24}^{(70)}$	-3	-3	3	-3	3	1	-1	1	-1	-1	1	-1	1	9	-9	9	-9	-1	1	-1	1	.	.	.	
$\chi_{24}^{(71)}$	-21	-3	3	3	-3	1	-1	-1	1	-1	1	1	-1	9	-9	-9	9	1	-1	-1	1	.	.	.	
$\chi_{24}^{(72)}$	3	-3	3	3	-3	1	-1	-1	1	-1	1	1	-1	9	-9	-9	9	-1	1	1	-1	.	.	.	
$\chi_{24}^{(73)}$	-3	9	9	9	9	-1	-1	-1	-1	-1	-1	-1	-1	9	9	9	9	-1	-1	-1	-1	.	.	.	
$\chi_{24}^{(74)}$	3	9	9	-9	-9	-1	-1	1	1	-1	-1	1	1	9	9	-9	-9	-1	-1	1	1	.	.	.	
$\chi_{24}^{(75)}$	-3	9	-9	9	-9	1	-1	1	-1	-1	1	-1	1	9	-9	9	-9	1	-1	1	-1	.	.	.	
$\chi_{24}^{(76)}$	3	9	-9	-9	9	1	-1	-1	1	-1	1	1	-1	9	-9	-9	9	1	-1	-1	1	.	.	.	
$\chi_{24}^{(77)}$	-14	6	6	6	6	.	.	.	.	.	.	.	.	-15	-15	-15	-15	.	.	.	.	.	.	.
$\chi_{24}^{(78)}$	2	-2	-2	-2	-2	.	.	.	.	.	.	.	.	15	15	15	15	.	.	.	.	.	.	.
$\chi_{24}^{(79)}$	14	6	6	-6	-6	.	.	.	.	.	.	.	.	-15	-15	15	15	.	.	.	.	.	.	.
$\chi_{24}^{(80)}$	-2	-2	-2	2	2	.	.	.	.	.	.	.	.	15	15	-15	-15	.	.	.	.	.	.	.
$\chi_{24}^{(81)}$	-14	6	-6	6	-6	.	.	.	.	.	.	.	.	-15	15	-15	15	.	.	.	.	.	.	.
$\chi_{24}^{(82)}$	2	-2	2	-2	2	.	.	.	.	.	.	.	.	15	-15	15	-15	.	.	.	.	.	.	.
$\chi_{24}^{(83)}$	14	6	-6	-6	6	.	.	.	.	.	.	.	.	-15	15	15	-15	.	.	.	.	.	.	.
$\chi_{24}^{(84)}$	-2	-2	2	2	-2	.	.	.	.	.	.	.	.	15	-15	-15	15	.	.	.	.	.	.	.
$\chi_{24}^{(85)}$	24	1	1	1	1	1	1	1	1	-9	-9	-9	-9	-1	-1	-1	-1
$\chi_{24}^{(86)}$	-24	1	1	-1	-1	1	1	-1	-1	-9	-9	9	9	-1	-1	1	1
$\chi_{24}^{(87)}$	24	-1	1	-1	1	1	-1	1	-1	-9	9	-9	9	1	-1	1	-1
$\chi_{24}^{(88)}$	-24	-1	1	1	-1	1	-1	-1	1	-9	9	9	-9	1	-1	-1	1
$\chi_{24}^{(89)}$	24	-5	-5	-5	-5
$\chi_{24}^{(90)}$	-24	-5	-5	5	5

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$\chi_{24}^{(91)}$	24	-5	5	-5	5	
$\chi_{24}^{(92)}$	-24	-5	5	5	-5	
$\chi_{24}^{(93)}$	-8	10	10	10	10	
$\chi_{24}^{(94)}$	8	10	10	-10	-10	
$\chi_{24}^{(95)}$	-8	10	-10	10	-10	
$\chi_{24}^{(96)}$	8	.	.	.	.	.	.	.	.	.	.	.	10	-10	-10	10	.	.	.	.	.	.	.	.
$\chi_{24}^{(97)}$	-21	-5	-5	-5	-5	.	.	.	.	.	.	.	.	.	.	.	-1	-1	-1	-1	.	.	.	.
$\chi_{24}^{(98)}$	21	-5	-5	5	5	.	.	.	.	.	.	.	.	.	.	.	-1	-1	1	1	.	.	.	.
$\chi_{24}^{(99)}$	-21	-5	5	-5	5	.	.	.	.	.	.	.	.	.	.	.	1	-1	1	-1	.	.	.	.
$\chi_{24}^{(100)}$	21	-5	5	5	-5	.	.	.	.	.	.	.	.	.	.	.	1	-1	-1	1	.	.	.	.
$\chi_{24}^{(101)}$	16	.	.	.	.	1	1	1	1	1	1	1	6	6	6	6	.	.	.	.	.	.	.	.
$\chi_{24}^{(102)}$	-16	.	.	.	.	1	1	-1	-1	1	1	-1	6	6	-6	-6	.	.	.	.	.	.	.	.
$\chi_{24}^{(103)}$	16	.	.	.	.	-1	1	-1	1	1	-1	-1	6	-6	6	-6	.	.	.	.	.	.	.	.
$\chi_{24}^{(104)}$	-16	.	.	.	.	-1	1	1	-1	1	-1	-1	6	-6	-6	6	.	.	.	.	.	.	.	.
$\chi_{24}^{(105)}$	-6	6	6	6	6	1	1	1	1	-2	-2	-2	-9	-9	-9	-9	.	.	.	.	.	.	.	.
$\chi_{24}^{(106)}$	6	6	6	-6	-6	1	1	-1	-1	-2	-2	2	2	-9	-9	9	9	.	.	.	.	.	.	.
$\chi_{24}^{(107)}$	-6	6	-6	6	-6	-1	1	-1	1	-2	2	-2	2	-9	9	-9	9	.	.	.	.	.	.	.
$\chi_{24}^{(108)}$	6	6	-6	-6	6	-1	1	1	-1	-2	2	2	-9	9	9	-9	.	.	.	.	.	.	.	.
$\chi_{24}^{(109)}$	-27	-3	-3	-3	-3	.	.	.	.	.	.	.	.	.	.	.	1	1	1	1	-1	-1	-1	-1
$\chi_{24}^{(110)}$	27	-3	-3	3	3	.	.	.	.	.	.	.	.	.	.	.	1	1	-1	-1	-1	-1	1	1
$\chi_{24}^{(111)}$	-27	-3	3	-3	3	.	.	.	.	.	.	.	.	.	.	.	-1	1	-1	1	1	-1	1	-1
$\chi_{24}^{(112)}$	27	-3	3	3	-3	.	.	.	.	.	.	.	.	.	.	.	-1	1	1	-1	1	-1	-1	1
$\chi_{24}^{(113)}$	4	-4	-4	-4	-4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{24}^{(114)}$	-4	-4	-4	4	4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{24}^{(115)}$	4	-4	4	-4	4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{24}^{(116)}$	-4	-4	4	4	-4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{24}^{(117)}$	-1	-1	-1	-1	2	2	2	2	-16	-16	-16	-16	1	1	1	1
$\chi_{24}^{(118)}$	-1	-1	1	1	2	2	-2	-2	-16	-16	16	16	1	1	-1	-1
$\chi_{24}^{(119)}$	1	-1	1	-1	2	-2	2	-2	-16	16	-16	16	-1	1	-1	1
$\chi_{24}^{(120)}$	1	-1	-1	1	2	-2	-2	2	-16	16	16	-16	-1	1	1	-1

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$\chi_{24}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{24}^{(2)}$	-1	1	1	-1	1	-1	-1	1	1	-1	-1	1	-1	1	-1	1	-1	-1	1	-1	1	1	-1	-1
$\chi_{24}^{(3)}$	-1	1	-1	1	1	-1	1	-1	1	-1	1	-1	-1	1	-1	1	-1	1	-1	-1	1	-1	1	-1
$\chi_{24}^{(4)}$	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1
$\chi_{24}^{(5)}$	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	-5	-5	-5	-5	1	1	1	1	-2	-2	-2	-2
$\chi_{24}^{(6)}$	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	-5	-5	5	5	1	1	-1	-1	-2	-2	2	2
$\chi_{24}^{(7)}$	1	-1	1	-1	1	-1	1	-1	-1	1	-1	1	5	-5	5	-5	1	-1	1	-1	2	-2	2	-2
$\chi_{24}^{(8)}$	1	-1	-1	1	1	-1	-1	1	-1	1	1	-1	5	-5	-5	5	1	-1	-1	1	2	-2	-2	2
$\chi_{24}^{(9)}$	-1	-1	-1	-1	3	3	3	3	-1	-1	-1	-1	-5	-5	-5	-5	1	1	1	1	-2	-2	-2	-2
$\chi_{24}^{(10)}$	-1	-1	1	1	3	3	-3	-3	-1	-1	1	1	-5	-5	5	5	1	1	-1	-1	-2	-2	2	2
$\chi_{24}^{(11)}$	1	-1	1	-1	3	-3	3	-3	-1	1	-1	1	5	-5	5	-5	1	-1	1	-1	2	-2	2	-2
$\chi_{24}^{(12)}$	1	-1	-1	1	3	-3	-3	3	-1	1	1	-1	5	-5	-5	5	1	-1	-1	1	2	-2	-2	-2
$\chi_{24}^{(13)}$	.	.	.	.	.	.	.	.	-3	-3	-3	-3	-11	-11	-11	-11	-2	-2	-2	-2	-2	-2	-2	-2
$\chi_{24}^{(14)}$	.	.	.	.	.	.	.	.	-3	-3	3	3	-11	-11	11	11	-2	-2	2	2	-2	-2	2	2
$\chi_{24}^{(15)}$	.	.	.	.	.	.	.	.	-3	3	-3	3	11	-11	11	-11	-2	2	-2	2	2	-2	2	-2
$\chi_{24}^{(16)}$	.	.	.	.	.	.	.	.	-3	3	3	-3	11	-11	-11	11	-2	2	2	-2	2	-2	-2	2
$\chi_{24}^{(17)}$	.	.	.	.	.	.	.	.	-3	-3	-3	-3	9	9	9	9	.	.	.	.	.	.	.	.
$\chi_{24}^{(18)}$	.	.	.	.	.	.	.	.	-3	-3	3	3	9	9	-9	-9	.	.	.	.	.	.	.	.
$\chi_{24}^{(19)}$	.	.	.	.	.	.	.	.	-3	3	-3	3	-9	9	-9	9	.	.	.	.	.	.	.	.
$\chi_{24}^{(20)}$	.	.	.	.	.	.	.	.	-3	3	3	-3	-9	9	9	-9	.	.	.	.	.	.	.	.
$\chi_{24}^{(21)}$	.	.	.	.	.	.	.	.	3	3	3	3	15	15	15	15	.	.	.	.	3	3	3	3
$\chi_{24}^{(22)}$	.	.	.	.	.	.	.	.	3	3	-3	-3	15	15	-15	-15	.	.	.	.	3	3	-3	-3
$\chi_{24}^{(23)}$	.	.	.	.	.	.	.	.	3	-3	3	-3	-15	15	-15	15	.	.	.	.	-3	3	-3	3
$\chi_{24}^{(24)}$	.	.	.	.	.	.	.	.	3	-3	-3	3	-15	15	15	-15	.	.	.	.	-3	3	3	-3
$\chi_{24}^{(25)}$	.	.	.	.	2	2	2	2	3	3	3	3	-5	-5	-5	-5	-2	-2	-2	-2	1	1	1	-3
$\chi_{24}^{(26)}$	.	.	.	.	2	2	2	2	3	3	3	3	15	15	15	15	.	.	.	.	3	3	3	-1
$\chi_{24}^{(27)}$	.	.	.	.	2	2	-2	-2	3	3	-3	-3	-5	-5	5	5	-2	-2	2	2	1	1	-1	-3
$\chi_{24}^{(28)}$	2	2	-2	-2	3	3	-3	-3	15	15	-15	-15	3	3	-3	-1
$\chi_{24}^{(29)}$	2	-2	2	-2	3	-3	3	-3	5	-5	5	-5	-2	2	-2	2	-1	1	-1	3
$\chi_{24}^{(30)}$	2	-2	2	-2	3	-3	3	-3	-15	15	-15	15	-3	3	-3	1

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$\chi_{24}^{(31)}$	2	-2	-2	2	3	-3	-3	3	5	-5	-5	5	-2	2	2	-2	-1	1	1	-1	3	-3	-3
$\chi_{24}^{(32)}$	2	-2	-2	2	3	-3	-3	3	-15	15	15	-15	-3	3	3	-3	1	-1	-1
$\chi_{24}^{(33)}$	2	2	2	2	-24	-24	-24	-24	-3	-3	-3	-3	1	1	1
$\chi_{24}^{(34)}$	.	.	.	.	2	2	-2	-2	.	.	.	.	-24	-24	24	24	.	.	.	.	-3	-3	3	3	1	1	-1
$\chi_{24}^{(35)}$	.	.	.	.	2	-2	2	-2	.	.	.	.	24	-24	24	-24	.	.	.	.	3	-3	3	-3	-1	1	-1
$\chi_{24}^{(36)}$	.	.	.	.	2	-2	-2	2	.	.	.	.	24	-24	-24	24	.	.	.	.	3	-3	-3	3	-1	1	1
$\chi_{24}^{(37)}$	1	1	1	1	1	1	1	1	-2	-2	-2	-2	-10	-10	-10	-10	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_{24}^{(38)}$	1	1	-1	-1	1	1	-1	-1	-2	-2	2	2	-10	-10	10	10	-1	-1	1	1	-1	-1	1	1	-1	-1	1
$\chi_{24}^{(39)}$	-1	1	-1	1	1	-1	1	-1	-2	2	-2	2	10	-10	10	-10	-1	1	-1	1	1	-1	1	-1	1	-1	1
$\chi_{24}^{(40)}$	-1	1	1	-1	1	-1	-1	1	-2	2	2	-2	10	-10	-10	10	-1	1	1	-1	1	-1	-1	1	1	-1	-1
$\chi_{24}^{(41)}$	1	1	1	1	3	3	3	3	4	4	4	4	4	4	4	4	1	1	1	1	-2	-2	-2	-2	2	2	2
$\chi_{24}^{(42)}$	1	1	-1	-1	3	3	-3	-3	4	4	-4	-4	4	4	-4	-4	1	1	-1	-1	-2	-2	2	2	2	2	-2
$\chi_{24}^{(43)}$	-1	1	-1	1	3	-3	3	-3	4	-4	4	-4	-4	4	-4	4	1	-1	1	-1	2	-2	2	-2	-2	2	-2
$\chi_{24}^{(44)}$	-1	1	1	-1	3	-3	-3	3	4	-4	-4	4	-4	4	4	-4	1	-1	-1	1	2	-2	-2	2	-2	2	2
$\chi_{24}^{(45)}$	1	1	1	1	-3	-3	-3	-3	1	1	1	1	-35	-35	-35	-35	1	1	1	1	1	1	1	1	1	1	1
$\chi_{24}^{(46)}$	-1	-1	-1	-1	3	3	3	3	-7	-7	-7	-7	5	5	5	5	-1	-1	-1	-1	2	2	2	2	2	2	2
$\chi_{24}^{(47)}$	1	1	1	1	3	3	3	3	1	1	1	1	25	25	25	25	1	1	1	1	4	4	4	4	-4	-4	-4
$\chi_{24}^{(48)}$	1	1	-1	-1	-3	-3	3	3	1	1	-1	-1	-35	-35	35	35	1	1	-1	-1	1	1	-1	-1	1	1	-1
$\chi_{24}^{(49)}$	-1	-1	1	1	3	3	-3	-3	-7	-7	7	7	5	5	-5	-5	-1	-1	1	1	2	2	-2	-2	2	2	-2
$\chi_{24}^{(50)}$	1	1	-1	-1	3	3	-3	-3	1	1	-1	-1	25	25	-25	-25	1	1	-1	-1	4	4	-4	-4	-4	-4	4
$\chi_{24}^{(51)}$	1	-1	1	-1	3	-3	3	-3	-7	7	-7	7	-5	5	-5	5	-1	1	-1	1	-2	2	-2	2	-2	2	-2
$\chi_{24}^{(52)}$	-1	1	-1	1	3	-3	3	-3	1	-1	1	-1	-25	25	-25	25	1	-1	1	-1	-4	4	-4	4	4	-4	4
$\chi_{24}^{(53)}$	-1	1	-1	1	-3	3	-3	3	1	-1	1	-1	35	-35	35	-35	1	-1	1	-1	-1	1	-1	1	-1	1	-1
$\chi_{24}^{(54)}$	1	-1	-1	1	3	-3	-3	3	-7	7	7	-7	-5	5	5	-5	-1	1	1	-1	-2	2	2	-2	-2	2	2
$\chi_{24}^{(55)}$	-1	1	1	-1	3	-3	-3	3	1	-1	-1	1	-25	25	25	-25	1	-1	-1	1	-4	4	4	-4	4	-4	-4
$\chi_{24}^{(56)}$	-1	1	1	-1	-3	3	3	-3	1	-1	-1	1	35	-35	-35	35	1	-1	-1	1	-1	1	1	-1	-1	1	1
$\chi_{24}^{(57)}$	.	.	.	.	.	.	.	.	.	.	.	.	40	40	40	40	-2	-2	-2	-2	1	1	1	1	1	1	1
$\chi_{24}^{(58)}$	.	.	.	.	.	.	.	.	.	.	.	.	40	40	-40	-40	-2	-2	2	2	1	1	-1	-1	1	1	-1
$\chi_{24}^{(59)}$	.	.	.	.	.	.	.	.	.	.	.	.	-40	40	-40	40	-2	2	-2	2	-1	1	-1	1	-1	1	-1
$\chi_{24}^{(60)}$	.	.	.	.	.	.	.	.	.	.	.	.	-40	40	40	-40	-2	2	2	-2	-1	1	1	-1	-1	1	1
$\chi_{24}^{(61)}$	-1	-1	-1	-1	-3	-3	-3	-3	8	8	8	8	40	40	40	40	1	1	1	1	-2	-2	-2	-2	2	2	2
$\chi_{24}^{(62)}$	-1	-1	1	1	-3	-3	3	3	8	8	-8	-8	40	40	-40	-40	1	1	-1	-1	-2	-2	2	2	2	2	-2
$\chi_{24}^{(63)}$	1	-1	1	-1	-3	3	-3	3	8	-8	8	-8	-40	40	-40	40	1	-1	1	-1	2	-2	2	-2	-2	2	-2
$\chi_{24}^{(64)}$	1	-1	-1	1	-3	3	3	-3	8	-8	-8	8	-40	40	40	-40	1	-1	-1	1	2	-2	-2	2	-2	2	2
$\chi_{24}^{(65)}$	.	.	.	.	.	.	.	.	-3	-3	-3	-3	-51	-51	-51	-51	.	.	.	.	-3	-3	-3	-3	-3	-3	-3
$\chi_{24}^{(66)}$	.	.	.	.	.	.	.	.	-3	-3	-3	-3	-39	-39	-39	-39	.	.	.	.	3	3	3	3	3	3	3
$\chi_{24}^{(67)}$	.	.	.	.	.	.	.	.	-3	-3	3	3	-51	-51	51	51	.	.	.	.	-3	-3	3	3	-3	-3	3
$\chi_{24}^{(68)}$	.	.	.	.	.	.	.	.	-3	-3	3	3	-39	-39	39	39	.	.	.	.	3	3	-3	-3	3	3	-3
$\chi_{24}^{(69)}$	.	.	.	.	.	.	.	.	-3	3	-3	3	39	-39	39	-39	.	.	.	.	-3	3	-3	3	-3	3	-3
$\chi_{24}^{(70)}$	.	.	.	.	.	.	.	.	-3	3	-3	3	51	-51	51	-51	.	.	.	.	3	-3	3	-3	3	-3	3
$\chi_{24}^{(71)}$	.	.	.	.	.	.	.	.	-3	3	3	-3	39	-39	-39	39	.	.	.	.	-3	3	3	-3	-3	3	3
$\chi_{24}^{(72)}$	.	.	.	.	.	.	.	.	-3	3	3	-3	51	-51	-51	51	.	.	.	.	3	-3	-3	3	3	-3	-3
$\chi_{24}^{(73)}$	-3	-3	-3	-3	21	21	21	21	-3	-3	-3	-3	-3	-3	-3
$\chi_{24}^{(74)}$	-3	-3	3	3	21	21	-21	-21	-3	-3	3	3	-3	-3	3
$\chi_{24}^{(75)}$	-3	3	-3	3	-21	21	-21	21	3	-3	3	-3	3	-3	3

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$\chi_{24}^{(76)}$	-3	3	3	-3	-21	21	21	-21	3	-3	-3	3	3	-3	-3
$\chi_{24}^{(77)}$	-1	-1	-1	-1	3	3	3	3	2	2	2	2	10	10	10	10	1	1	1	1	1	1	1	1	1	1	1
$\chi_{24}^{(78)}$	-6	-6	-6	-6	50	50	50	50	2	2	2	2	-1	-1	-1	-1	-1	-1	-1
$\chi_{24}^{(79)}$	-1	-1	1	1	3	3	-3	-3	2	2	-2	-2	10	10	-10	-10	1	1	-1	-1	1	1	-1	-1	1	1	-1
$\chi_{24}^{(80)}$	.	.	.	.	.	.	.	.	-6	-6	6	6	50	50	-50	-50	2	2	-2	-2	-1	-1	1	1	-1	-1	1
$\chi_{24}^{(81)}$	1	-1	1	-1	3	-3	3	-3	2	-2	2	-2	-10	10	-10	10	1	-1	1	-1	-1	1	-1	1	-1	1	-1
$\chi_{24}^{(82)}$	.	.	.	.	.	.	.	.	-6	6	-6	6	-50	50	-50	50	2	-2	2	-2	1	-1	1	-1	1	-1	1
$\chi_{24}^{(83)}$	1	-1	-1	1	3	-3	-3	3	2	-2	-2	2	-10	10	10	-10	1	-1	-1	1	-1	1	1	-1	-1	1	1
$\chi_{24}^{(84)}$	.	.	.	.	.	.	.	.	-6	6	6	-6	-50	50	50	-50	2	-2	-2	2	1	-1	-1	1	1	-1	-1
$\chi_{24}^{(85)}$	.	.	.	.	.	.	.	.	.	.	.	.	-24	-24	-24	-24	.	.	.	.	-3	-3	-3	-3	-3	-3	-3
$\chi_{24}^{(86)}$	.	.	.	.	.	.	.	.	.	.	.	.	-24	-24	24	24	.	.	.	.	-3	-3	3	3	-3	-3	3
$\chi_{24}^{(87)}$	.	.	.	.	.	.	.	.	.	.	.	.	24	-24	24	-24	.	.	.	.	3	-3	3	-3	3	-3	3
$\chi_{24}^{(88)}$	.	.	.	.	.	.	.	.	.	.	.	.	24	-24	-24	24	.	.	.	.	3	-3	-3	3	3	-3	-3
$\chi_{24}^{(89)}$	.	.	.	.	-2	-2	-2	-2	.	.	.	.	40	40	40	40	-2	-2	-2	-2	1	1	1	1	-3	-3	-3
$\chi_{24}^{(90)}$	.	.	.	.	-2	-2	2	2	.	.	.	.	40	40	-40	-40	-2	-2	2	2	1	1	-1	-1	-3	-3	3
$\chi_{24}^{(91)}$	.	.	.	.	-2	2	-2	2	.	.	.	.	-40	40	-40	40	-2	2	-2	2	-1	1	-1	1	3	-3	3
$\chi_{24}^{(92)}$	.	.	.	.	-2	2	2	-2	.	.	.	.	-40	40	40	-40	-2	2	2	-2	-1	1	1	-1	3	-3	-3
$\chi_{24}^{(93)}$	-1	-1	-1	-1	1	1	1	1	8	8	8	8	-40	-40	-40	-40	-1	-1	-1	-1	2	2	2	2	-2	-2	-2
$\chi_{24}^{(94)}$	-1	-1	1	1	1	1	-1	-1	8	8	-8	-8	-40	-40	40	40	-1	-1	1	1	2	2	-2	-2	-2	-2	2
$\chi_{24}^{(95)}$	1	-1	1	-1	1	-1	1	-1	8	-8	8	-8	40	-40	40	-40	-1	1	-1	1	-2	2	-2	2	2	-2	2
$\chi_{24}^{(96)}$	1	-1	-1	1	1	-1	-1	1	8	-8	-8	8	40	-40	-40	40	-1	1	1	-1	-2	2	2	-2	2	-2	-2
$\chi_{24}^{(97)}$	.	.	.	.	.	.	.	.	3	3	3	3	-45	-45	-45	-45	.	.	.	.	.	.	.	.	.	.	.
$\chi_{24}^{(98)}$	.	.	.	.	.	.	.	.	3	3	-3	-3	-45	-45	45	45	.	.	.	.	.	.	.	.	.	.	.
$\chi_{24}^{(99)}$	.	.	.	.	.	.	.	.	3	-3	3	-3	45	-45	45	-45	.	.	.	.	.	.	.	.	.	.	.
$\chi_{24}^{(100)}$	.	.	.	.	.	.	.	.	3	-3	-3	3	45	-45	-45	45	.	.	.	.	.	.	.	.	.	.	.
$\chi_{24}^{(101)}$	.	.	.	.	.	.	.	.	.	.	.	.	-16	-16	-16	-16	2	2	2	2	2	2	2	2	-2	-2	-2
$\chi_{24}^{(102)}$	.	.	.	.	.	.	.	.	.	.	.	.	-16	-16	16	16	2	2	-2	-2	2	2	-2	-2	-2	-2	2
$\chi_{24}^{(103)}$	.	.	.	.	.	.	.	.	.	.	.	.	16	-16	16	-16	2	-2	2	-2	-2	2	-2	2	2	-2	2
$\chi_{24}^{(104)}$	.	.	.	.	.	.	.	.	.	.	.	.	16	-16	-16	16	2	-2	-2	2	-2	2	2	-2	2	-2	-2
$\chi_{24}^{(105)}$	.	.	.	.	.	.	.	.	-6	-6	-6	-6	-30	-30	-30	-30	.	.	.	.	3	3	3	3	3	3	3
$\chi_{24}^{(106)}$	.	.	.	.	.	.	.	.	-6	-6	6	6	-30	-30	30	30	.	.	.	.	3	3	-3	-3	3	3	-3
$\chi_{24}^{(107)}$	.	.	.	.	.	.	.	.	-6	6	-6	6	30	-30	30	-30	.	.	.	.	-3	3	-3	3	-3	3	-3
$\chi_{24}^{(108)}$	.	.	.	.	.	.	.	.	-6	6	6	-6	30	-30	-30	30	.	.	.	.	-3	3	3	-3	-3	3	3
$\chi_{24}^{(109)}$	.	.	.	.	.	.	.	.	-3	-3	-3	-3	45	45	45	45	.	.	.	.	.	.	.	.	.	.	.
$\chi_{24}^{(110)}$	.	.	.	.	.	.	.	.	-3	-3	3	3	45	45	-45	-45	.	.	.	.	.	.	.	.	.	.	.
$\chi_{24}^{(111)}$	.	.	.	.	.	.	.	.	-3	3	-3	3	-45	45	-45	45	.	.	.	.	.	.	.	.	.	.	.
$\chi_{24}^{(112)}$	.	.	.	.	.	.	.	.	-3	3	3	-3	-45	45	45	-45	.	.	.	.	.	.	.	.	.	.	.
$\chi_{24}^{(113)}$	1	1	1	1	3	3	3	3	4	4	4	4	20	20	20	20	-1	-1	-1	-1	-4	-4	-4	-4	4	4	4
$\chi_{24}^{(114)}$	1	1	-1	-1	3	3	-3	-3	4	4	-4	-4	20	20	-20	-20	-1	-1	1	1	-4	-4	4	4	4	4	-4
$\chi_{24}^{(115)}$	-1	1	-1	1	3	-3	3	-3	4	-4	4	-4	-20	20	-20	20	-1	1	-1	1	4	-4	4	-4	-4	4	-4
$\chi_{24}^{(116)}$	-1	1	1	-1	3	-3	-3	3	4	-4	-4	4	-20	20	20	-20	-1	1	1	-1	4	-4	-4	4	-4	4	4
$\chi_{24}^{(117)}$	.	.	.	.	-4	-4	-4	-4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{24}^{(118)}$	.	.	.	.	-4	-4	4	4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{24}^{(119)}$	.	.	.	.	-4	4	-4	4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{24}^{(120)}$	.	.	.	.	-4	4	4	-4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

	80										90										100									
$\chi_{24}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{24}^{(2)}$	-1	1	-1	-1	1	-1	1	1	-1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	-1	1	1	-1	1	1	-1	1	-1
$\chi_{24}^{(3)}$	1	1	-1	1	-1	-1	1	-1	1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	-1	1	-1	1	-1	1	1	-1	1
$\chi_{24}^{(4)}$	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1
$\chi_{24}^{(5)}$	2	1	1	1	1	-1	-1	-1	-1	1	1	1	1	3	3	3	3	.	.	.	.	-2	-2	-2	-2	1	1	-1	1	-1
$\chi_{24}^{(6)}$	-2	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	3	3	-3	-3	.	.	.	.	-2	-2	2	2	1	1	-1	1	-1
$\chi_{24}^{(7)}$	2	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	3	-3	3	-3	.	.	.	.	2	-2	2	-2	1	1	-1	1	-1
$\chi_{24}^{(8)}$	-2	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	3	-3	-3	3	.	.	.	.	2	-2	-2	2	1	1	-1	1	-1
$\chi_{24}^{(9)}$	-2	-1	-1	-1	-1	3	3	3	3	1	1	1	1	3	3	3	3	.	.	.	.	.	.	.	.	1	1	-1	1	-1
$\chi_{24}^{(10)}$	2	-1	-1	1	1	3	3	-3	-3	1	1	-1	-1	3	3	-3	-3	.	.	.	.	.	.	.	.	1	1	-1	1	-1
$\chi_{24}^{(11)}$	-2	-1	1	-1	1	-3	3	-3	3	1	-1	1	-1	3	-3	3	-3	.	.	.	.	.	.	.	.	1	1	-1	1	-1
$\chi_{24}^{(12)}$	2	-1	1	1	-1	-3	3	3	-3	1	-1	-1	1	3	-3	-3	3	.	.	.	.	.	.	.	.	1	1	-1	1	-1
$\chi_{24}^{(13)}$	2	-1	-1	-1	-1	1	1	1	1	1	1	1	1	5	5	5	5	-1	-1	-1	-1	.	.	.	.	1	1	-1	1	-1
$\chi_{24}^{(14)}$	-2	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	5	5	-5	-5	-1	-1	1	1	.	.	.	.	1	1	-1	1	-1
$\chi_{24}^{(15)}$	2	-1	1	-1	1	-1	1	-1	1	1	-1	1	-1	5	-5	5	-5	-1	1	-1	1	.	.	.	.	1	1	-1	1	-1
$\chi_{24}^{(16)}$	-2	-1	1	1	-1	-1	1	1	-1	1	-1	-1	1	5	-5	-5	5	-1	1	1	-1	.	.	.	.	1	1	-1	1	-1
$\chi_{24}^{(17)}$	.	1	1	1	1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	2	2	2	2	1	1	-1	1	-1
$\chi_{24}^{(18)}$	.	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	2	2	-2	-2	1	1	-1	1	-1
$\chi_{24}^{(19)}$	.	1	-1	1	-1	-1	1	-1	1	-1	1	-1	1	1	-1	1	-1	-1	1	-1	1	-2	2	-2	2	1	1	-1	1	-1
$\chi_{24}^{(20)}$	.	1	-1	-1	1	-1	1	1	-1	-1	1	1	-1	1	-1	-1	1	-1	1	1	-1	-2	2	2	-2	1	1	-1	1	-1
$\chi_{24}^{(21)}$	3	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	7	7	7	7	.	.	.	.	1	1	1	1	1	1	-1	1	-1
$\chi_{24}^{(22)}$	-3	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	7	7	-7	-7	.	.	.	.	1	1	-1	-1	1	1	-1	1	-1
$\chi_{24}^{(23)}$	3	-1	1	-1	1	1	-1	1	-1	1	-1	1	-1	7	-7	7	-7	.	.	.	.	-1	1	-1	1	1	1	-1	1	-1
$\chi_{24}^{(24)}$	-3	-1	1	1	-1	1	-1	-1	1	1	-1	-1	1	7	-7	-7	7	.	.	.	.	-1	1	1	-1	1	1	-1	1	-1
$\chi_{24}^{(25)}$	-3	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-5	-5	-5	-5	.	.	.	.	-1	-1	-1	-1	1	1	-1	1	-1
$\chi_{24}^{(26)}$	-1	1	1	1	1	3	3	3	3	1	1	1	1	7	7	7	7	.	.	.	.	-1	-1	-1	-1	1	1	-1	1	-1
$\chi_{24}^{(27)}$	3	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	-5	-5	5	5	.	.	.	.	-1	-1	1	1	1	1	-1	1	-1
$\chi_{24}^{(28)}$	1	1	1	-1	-1	3	3	-3	-3	1	1	-1	-1	7	7	-7	-7	.	.	.	.	-1	-1	1	1	1	1	-1	1	-1
$\chi_{24}^{(29)}$	-3	1	-1	1	-1	1	-1	1	-1	-1	1	-1	1	-5	5	-5	5	.	.	.	.	1	-1	1	-1	1	1	-1	1	-1
$\chi_{24}^{(30)}$	-1	1	-1	1	-1	-3	3	-3	3	1	-1	1	-1	7	-7	7	-7	.	.	.	.	1	-1	1	-1	1	1	-1	1	-1
$\chi_{24}^{(31)}$	3	1	-1	-1	1	1	-1	-1	1	-1	1	1	-1	-5	5	5	-5	.	.	.	.	1	-1	-1	1	1	1	-1	1	-1
$\chi_{24}^{(32)}$	1	1	-1	-1	1	-3	3	3	-3	1	-1	-1	1	7	-7	-7	7	.	.	.	.	1	-1	-1	1	1	1	-1	1	-1
$\chi_{24}^{(33)}$	1	.	.	.	.	.	.	.	.	.	.	.	.	8	8	8	8	1	1	1	1	1	1	1	1	1	1	-1	1	-1
$\chi_{24}^{(34)}$	-1	.	.	.	.	.	.	.	.	.	.	.	.	8	8	-8	-8	1	1	-1	-1	1	1	-1	-1	1	1	-1	1	-1
$\chi_{24}^{(35)}$	1	.	.	.	.	.	.	.	.	.	.	.	.	8	-8	8	-8	1	-1	1	-1	-1	1	-1	1	1	-1	1	-1	1
$\chi_{24}^{(36)}$	-1	.	.	.	.	.	.	.	.	.	.	.	.	8	-8	-8	8	1	-1	-1	1	-1	1	-1	1	1	-1	1	-1	1
$\chi_{24}^{(37)}$	-1	.	.	.	.	2	2	2	2	-2	-2	-2	-2	6	6	6	6	.	.	.	.	-1	-1	-1	-1	1	1	-1	1	-1
$\chi_{24}^{(38)}$	1	.	.	.	.	2	2	-2	-2	-2	-2	2	2	6	6	-6	-6	.	.	.	.	-1	-1	1	1	1	1	-1	1	-1
$\chi_{24}^{(39)}$	-1	.	.	.	.	-2	2	-2	2	-2	2	-2	2	6	-6	6	-6	.	.	.	.	1	-1	1	-1	1	1	-1	1	-1
$\chi_{24}^{(40)}$	1	.	.	.	.	-2	2	2	-2	-2	2	2	-2	6	-6	-6	6	.	.	.	.	1	-1	-1	1	1	-1	1	-1	1
$\chi_{24}^{(41)}$	2	.	.	.	.	4	4	4	4	.	.	.	.	4	4	4	4	-1	-1	-1	-1	.	.	.	.	1	1	-1	1	-1
$\chi_{24}^{(42)}$	-2	.	.	.	.	4	4	-4	-4	.	.	.	.	4	4	-4	-4	-1	-1	1	1	.	.	.	.	1	1	-1	1	-1
$\chi_{24}^{(43)}$	2	.	.	.	.	-4	4	-4	4	.	.	.	.	4	-4	4	-4	-1	1	-1	1	.	.	.	.	1	1	-1	1	-1
$\chi_{24}^{(44)}$	-2	.	.	.	.	-4	4	4	-4	.	.	.	.	4	-4	-4	4	-1	1	1	-1	.	.	.	.	1	1	-1	1	-1
$\chi_{24}^{(45)}$	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	5	5	5	5	.	.	.	.	-1	-1	-1	-1	1	1	-1	1	-1

	80												90												100			
$\chi_{24}^{(46)}$	2	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	-3	-3	-3	-3	.	.	.	.	.	.	.	.	.	.	.
$\chi_{24}^{(47)}$	-4	-1	-1	-1	-1	-3	-3	-3	-3	1	1	1	1	9	9	9	9	.	.	.	.	.	.	.	.	.	.	.
$\chi_{24}^{(48)}$	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	5	5	-5	-5	.	.	.	.	-1	-1	1	1			
$\chi_{24}^{(49)}$	-2	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	-3	-3	3	3	.	.	.	.	.	.	.	.	.	.	.
$\chi_{24}^{(50)}$	4	-1	-1	1	1	-3	-3	3	3	1	1	-1	-1	9	9	-9	-9	.	.	.	.	.	.	.	.	.	.	.
$\chi_{24}^{(51)}$	2	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-3	3	-3	3	.	.	.	.	.	.	.	.	.	.	.
$\chi_{24}^{(52)}$	-4	-1	1	-1	1	3	-3	3	-3	1	-1	1	-1	9	-9	9	-9	.	.	.	.	.	.	.	.	.	.	.
$\chi_{24}^{(53)}$	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	5	-5	5	-5	.	.	.	.	1	-1	1	-1			
$\chi_{24}^{(54)}$	-2	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-3	3	3	-3	.	.	.	.	.	.	.	.	.	.	.
$\chi_{24}^{(55)}$	4	-1	1	1	-1	3	-3	-3	3	1	-1	-1	1	9	-9	-9	9	.	.	.	.	.	.	.	.	.	.	.
$\chi_{24}^{(56)}$	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	5	-5	-5	5	.	.	.	.	1	-1	-1	1			
$\chi_{24}^{(57)}$	1	.	.	.	.	.	.	.	.	.	.	.	.	8	8	8	8	.	.	.	.	-1	-1	-1	-1			
$\chi_{24}^{(58)}$	-1	.	.	.	.	.	.	.	.	.	.	.	.	8	8	-8	-8	.	.	.	.	-1	-1	1	1			
$\chi_{24}^{(59)}$	1	.	.	.	.	.	.	.	.	.	.	.	.	8	-8	8	-8	.	.	.	.	1	-1	1	-1			
$\chi_{24}^{(60)}$	-1	.	.	.	.	.	.	.	.	.	.	.	.	8	-8	-8	8	.	.	.	.	1	-1	-1	1			
$\chi_{24}^{(61)}$	2	.	.	.	.	.	.	.	.	.	.	.	.	8	8	8	8	.	.	.	.	.	.	.	.	.	.	.
$\chi_{24}^{(62)}$	-2	.	.	.	.	.	.	.	.	.	.	.	.	8	8	-8	-8	.	.	.	.	.	.	.	.	.	.	.
$\chi_{24}^{(63)}$	2	.	.	.	.	.	.	.	.	.	.	.	.	8	-8	8	-8	.	.	.	.	.	.	.	.	.	.	.
$\chi_{24}^{(64)}$	-2	.	.	.	.	.	.	.	.	.	.	.	.	8	-8	-8	8	.	.	.	.	.	.	.	.	.	.	.
$\chi_{24}^{(65)}$	-3	1	1	1	1	-3	-3	-3	-3	1	1	1	1	13	13	13	13	-1	-1	-1	-1	1	1	1	1			
$\chi_{24}^{(66)}$	3	1	1	1	1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	1	1	1			
$\chi_{24}^{(67)}$	3	1	1	-1	-1	-3	-3	3	3	1	1	-1	-1	13	13	-13	-13	-1	-1	1	1	1	1	1	17	-1	-1	
$\chi_{24}^{(68)}$	-3	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1			
$\chi_{24}^{(69)}$	3	1	-1	1	-1	-1	1	-1	1	-1	1	-1	1	1	-1	1	-1	1	-1	1	-1	-1	-1	1	-1	1		
$\chi_{24}^{(70)}$	-3	1	-1	1	-1	3	-3	3	-3	1	-1	1	-1	13	-13	13	-13	-1	1	-1	1	-1	1	-1	1	-1	1	
$\chi_{24}^{(71)}$	-3	1	-1	-1	1	-1	1	1	-1	-1	1	1	-1	1	-1	-1	1	1	-1	-1	1	-1	1	-1	1	1	-1	
$\chi_{24}^{(72)}$	3	1	-1	-1	1	3	-3	-3	3	1	-1	-1	1	13	-13	-13	13	-1	1	1	-1	-1	1	1	-1	1	-1	
$\chi_{24}^{(73)}$	-3	-1	-1	-1	-1	1	1	1	1	1	1	1	1	-11	-11	-11	-11	1	1	1	1	1	1	1	1	1	1	
$\chi_{24}^{(74)}$	3	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	-11	-11	11	11	1	1	-1	-1	1	1	-1	-1	-1	-1	
$\chi_{24}^{(75)}$	-3	-1	1	-1	1	-1	1	-1	1	1	-1	1	-1	-11	11	-11	11	1	-1	1	-1	-1	-1	1	-1	1	-1	
$\chi_{24}^{(76)}$	3	-1	1	1	-1	-1	1	1	-1	1	-1	-1	1	-11	11	11	-11	1	-1	-1	1	-1	1	1	-1	1	-1	
$\chi_{24}^{(77)}$	1	.	.	.	.	-2	-2	-2	-2	-2	-2	-2	-2	10	10	10	10	.	.	.	.	1	1	1	1			
$\chi_{24}^{(78)}$	-1	.	.	.	.	-2	-2	-2	-2	-2	-2	-2	-2	2	2	2	2	.	.	.	.	-1	-1	-1	-1			
$\chi_{24}^{(79)}$	-1	.	.	.	.	-2	-2	2	2	-2	-2	2	2	10	10	-10	-10	.	.	.	.	1	1	-1	-1			
$\chi_{24}^{(80)}$	1	.	.	.	.	-2	-2	2	2	-2	-2	2	2	2	2	-2	-2	.	.	.	.	-1	-1	1	1			
$\chi_{24}^{(81)}$	1	.	.	.	.	2	-2	2	-2	-2	2	-2	2	10	-10	10	-10	.	.	.	.	-1	1	-1	1			
$\chi_{24}^{(82)}$	-1	.	.	.	.	2	-2	2	-2	-2	2	-2	2	2	-2	2	-2	.	.	.	.	1	-1	1	-1			
$\chi_{24}^{(83)}$	-1	.	.	.	.	2	-2	-2	2	-2	2	2	-2	10	-10	-10	10	.	.	.	.	-1	1	1	-1			
$\chi_{24}^{(84)}$	1	.	.	.	.	2	-2	-2	2	-2	2	2	-2	2	-2	-2	2	.	.	.	.	1	-1	-1	1			
$\chi_{24}^{(85)}$	-3	.	.	.	.	.	.	.	.	.	.	.	.	8	8	8	8	1	1	1	1	-1	-1	-1	-1			
$\chi_{24}^{(86)}$	3	.	.	.	.	.	.	.	.	.	.	.	.	8	8	-8	-8	1	1	-1	-1	-1	-1	1	1			
$\chi_{24}^{(87)}$	-3	.	.	.	.	.	.	.	.	.	.	.	.	8	-8	8	-8	1	-1	1	-1	1	-1	1	-1			
$\chi_{24}^{(88)}$	3	.	.	.	.	.	.	.	.	.	.	.	.	8	-8	-8	8	1	-1	-1	1	1	-1	-1	1			
$\chi_{24}^{(89)}$	-3	.	.	.	.	.	.	.	.	.	.	.	.	8	8	8	8	.	.	.	.	1	1	1	1			
$\chi_{24}^{(90)}$	3	.	.	.	.	.	.	.	.	.	.	.	.	8	8	-8	-8	.	.	.	.	1	1	-1	-1			

	110																120			
$\chi_{24}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{24}^{(2)}$	-1	1	1	-1	1	-1	-1	1	-1	1	1	-1	1	-1	-1	1	1	-1	-1	1
$\chi_{24}^{(3)}$	-1	1	-1	1	1	-1	1	-1	-1	1	-1	1	1	-1	1	-1	1	-1	1	-1
$\chi_{24}^{(4)}$	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1
$\chi_{24}^{(5)}$	.	.	.	.	1	1	1	1	-3	-3	-3	-3	-1	-1	-1	-1	.	.	.	.
$\chi_{24}^{(6)}$	.	.	.	.	1	1	-1	-1	-3	-3	3	3	-1	-1	1	1	.	.	.	.
$\chi_{24}^{(7)}$	.	.	.	.	1	-1	1	-1	3	-3	3	-3	-1	1	-1	1	.	.	.	.
$\chi_{24}^{(8)}$	.	.	.	.	1	-1	-1	1	3	-3	-3	3	-1	1	1	-1	.	.	.	.
$\chi_{24}^{(9)}$	.	.	.	.	-3	-3	-3	-3	1	1	1	1	1	1	1	1	-2	-2	-2	-2
$\chi_{24}^{(10)}$	.	.	.	.	-3	-3	3	3	1	1	-1	-1	1	1	-1	-1	-2	-2	2	2
$\chi_{24}^{(11)}$	.	.	.	.	-3	3	-3	3	-1	1	-1	1	1	-1	1	-1	-2	2	-2	2
$\chi_{24}^{(12)}$	.	.	.	.	-3	3	3	-3	-1	1	1	-1	1	-1	-1	1	-2	2	2	-2
$\chi_{24}^{(13)}$	2	2	2	2	-3	-3	-3	-3	-3	-3	-3	-3	2	2	2	2	.	.	.	.
$\chi_{24}^{(14)}$	2	2	-2	-2	-3	-3	3	3	-3	-3	3	3	2	2	-2	-2	.	.	.	.
$\chi_{24}^{(15)}$	-2	2	-2	2	-3	3	-3	3	3	-3	3	-3	2	-2	2	-2	.	.	.	.
$\chi_{24}^{(16)}$	-2	2	2	-2	-3	3	3	-3	3	-3	-3	3	2	-2	-2	2	.	.	.	.
$\chi_{24}^{(17)}$	-2	-2	-2	-2	-1	-1	-1	-1	3	3	3	3	.	.	.	.	.	.	.	.
$\chi_{24}^{(18)}$	-2	-2	2	2	-1	-1	1	1	3	3	-3	-3	.	.	.	.	.	.	.	.
$\chi_{24}^{(19)}$	2	-2	2	-2	-1	1	-1	1	-3	3	-3	3	.	.	.	.	.	.	.	.
$\chi_{24}^{(20)}$	2	-2	-2	2	-1	1	1	-1	-3	3	3	-3	.	.	.	.	.	.	.	.
$\chi_{24}^{(21)}$	1	1	1	1	1	1	1	1	5	5	5	5	.	.	.	.	-1	-1	-1	-1
$\chi_{24}^{(22)}$	1	1	-1	-1	1	1	-1	-1	5	5	-5	-5	.	.	.	.	-1	-1	1	1
$\chi_{24}^{(23)}$	-1	1	-1	1	1	-1	1	-1	-5	5	-5	5	.	.	.	.	-1	1	-1	1
$\chi_{24}^{(24)}$	-1	1	1	-1	1	-1	-1	1	-5	5	5	-5	.	.	.	.	-1	1	1	-1
$\chi_{24}^{(25)}$	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	.	.	.	.	-1	-1	-1	-1
$\chi_{24}^{(26)}$	1	1	1	1	5	5	5	5	1	1	1	1	2	2	2	2	1	1	1	1
$\chi_{24}^{(27)}$	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	.	.	.	.	-1	-1	1	1
$\chi_{24}^{(28)}$	1	1	-1	-1	5	5	-5	-5	1	1	-1	-1	2	2	-2	-2	1	1	-1	-1
$\chi_{24}^{(29)}$	-1	1	-1	1	-1	1	-1	1	1	-1	1	-1	.	.	.	.	-1	1	-1	1
$\chi_{24}^{(30)}$	-1	1	-1	1	5	-5	5	-5	-1	1	-1	1	2	-2	2	-2	1	-1	1	-1
$\chi_{24}^{(31)}$	-1	1	1	-1	-1	1	1	-1	1	-1	-1	1	.	.	.	.	-1	1	1	-1
$\chi_{24}^{(32)}$	-1	1	1	-1	5	-5	-5	5	-1	1	1	-1	2	-2	-2	2	1	-1	-1	1
$\chi_{24}^{(33)}$	-1	-1	-1	-1	4	4	4	4	-4	-4	-4	-4	-2	-2	-2	-2	-1	-1	-1	-1
$\chi_{24}^{(34)}$	-1	-1	1	1	4	4	-4	-4	-4	-4	4	4	-2	-2	2	2	-1	-1	1	1
$\chi_{24}^{(35)}$	1	-1	1	-1	4	-4	4	-4	4	-4	4	-4	-2	2	-2	2	-1	1	-1	1
$\chi_{24}^{(36)}$	1	-1	-1	1	4	-4	-4	4	4	-4	-4	4	-2	2	2	-2	-1	1	1	-1
$\chi_{24}^{(37)}$	3	3	3	3	2	2	2	2	2	2	2	2	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_{24}^{(38)}$	3	3	-3	-3	2	2	-2	-2	2	2	-2	-2	-1	-1	1	1	-1	-1	1	1
$\chi_{24}^{(39)}$	-3	3	-3	3	2	-2	2	-2	-2	2	-2	2	-1	1	-1	1	-1	1	-1	1
$\chi_{24}^{(40)}$	-3	3	3	-3	2	-2	-2	2	-2	2	2	-2	-1	1	1	-1	-1	1	1	-1
$\chi_{24}^{(41)}$	-2	-2	-2	-2	.	.	.	.	.	.	.	.	-1	-1	-1	-1	.	.	.	.
$\chi_{24}^{(42)}$	-2	-2	2	2	-1	-1	1	1
$\chi_{24}^{(43)}$	2	-2	2	-2	-1	1	-1	1
$\chi_{24}^{(44)}$	2	-2	-2	2	-1	1	1	-1
$\chi_{24}^{(45)}$	-1	-1	-1	-1	-1	-1	-1	-1	-5	-5	-5	-5	1	1	1	1	1	1	1	1

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$\chi_{24}^{(46)}$	3	3	3	3	-1	-1	-1	-1	-1	-1	-1	-1	2	2	2	2	
$\chi_{24}^{(47)}$	-3	-3	-3	-3	-3	-3	-3	-3	-1	-1	-1	-1	
$\chi_{24}^{(48)}$	-1	-1	1	1	-1	-1	1	1	-5	-5	5	5	1	1	-1	-1	1	1	-1	-1	
$\chi_{24}^{(49)}$	.	.	.	.	3	3	-3	-3	-1	-1	1	1	-1	-1	1	1	2	2	-2	-2
$\chi_{24}^{(50)}$	.	.	.	.	-3	-3	3	3	-3	-3	3	3	-1	-1	1	1	.	.	.	.
$\chi_{24}^{(51)}$	.	.	.	.	3	-3	3	-3	1	-1	1	-1	-1	1	-1	1	2	-2	2	-2
$\chi_{24}^{(52)}$	.	.	.	.	-3	3	-3	3	3	-3	3	-3	-1	1	-1	1	.	.	.	.
$\chi_{24}^{(53)}$	1	-1	1	-1	-1	1	-1	1	5	-5	5	-5	1	-1	1	-1	1	-1	1	-1	
$\chi_{24}^{(54)}$	.	.	.	.	3	-3	-3	3	1	-1	-1	1	-1	1	1	-1	2	-2	-2	2
$\chi_{24}^{(55)}$	.	.	.	.	-3	3	3	-3	3	-3	-3	3	-1	1	1	-1	.	.	.	.
$\chi_{24}^{(56)}$	1	-1	-1	1	-1	1	1	-1	5	-5	-5	5	1	-1	-1	1	1	-1	-1	1	
$\chi_{24}^{(57)}$	-1	-1	-1	-1	-4	-4	-4	-4	4	4	4	4	-2	-2	-2	-2	1	1	1	1	
$\chi_{24}^{(58)}$	-1	-1	1	1	-4	-4	4	4	4	4	-4	-4	-2	-2	2	2	1	1	-1	-1	
$\chi_{24}^{(59)}$	1	-1	1	-1	-4	4	-4	4	-4	4	-4	4	-2	2	-2	2	1	-1	1	-1	
$\chi_{24}^{(60)}$	1	-1	-1	1	-4	4	4	-4	-4	4	4	-4	-2	2	2	-2	1	-1	-1	1	
$\chi_{24}^{(61)}$	2	2	2	2	.	.	.	.	.	.	.	.	-1	-1	-1	-1	.	.	.	.
$\chi_{24}^{(62)}$	2	2	-2	-2	.	.	.	.	.	.	.	.	-1	-1	1	1	.	.	.	.
$\chi_{24}^{(63)}$	-2	2	-2	2	.	.	.	.	.	.	.	.	-1	1	-1	1	.	.	.	.
$\chi_{24}^{(64)}$	-2	2	2	-2	.	.	.	.	.	.	.	.	-1	1	1	-1	.	.	.	.
$\chi_{24}^{(65)}$	1	1	1	1	1	1	1	1	1	1	1	1	.	.	.	.	1	1	1	1
$\chi_{24}^{(66)}$	1	1	1	1	-5	-5	-5	-5	-1	-1	-1	-1	.	.	.	.	-1	-1	-1	-1
$\chi_{24}^{(67)}$	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	.	.	.	.	1	1	-1	-1
$\chi_{24}^{(68)}$	1	1	-1	-1	-5	-5	5	5	-1	-1	1	1	.	.	.	.	-1	-1	1	1
$\chi_{24}^{(69)}$	-1	1	-1	1	-5	5	-5	5	1	-1	1	-1	.	.	.	.	-1	1	-1	1
$\chi_{24}^{(70)}$	-1	1	-1	1	1	-1	1	-1	-1	1	-1	1	.	.	.	.	1	-1	1	-1
$\chi_{24}^{(71)}$	-1	1	1	-1	-5	5	5	-5	1	-1	-1	1	.	.	.	.	-1	1	1	-1
$\chi_{24}^{(72)}$	-1	1	1	-1	1	-1	-1	1	-1	1	1	-1	.	.	.	.	1	-1	-1	1
$\chi_{24}^{(73)}$	1	1	1	1	1	1	1	1	1	1	1	1	.	.	.	.	1	1	1	1
$\chi_{24}^{(74)}$	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	.	.	.	.	1	1	-1	-1
$\chi_{24}^{(75)}$	-1	1	-1	1	1	-1	1	-1	-1	1	-1	1	.	.	.	.	1	-1	1	-1
$\chi_{24}^{(76)}$	-1	1	1	-1	1	-1	-1	1	-1	1	1	-1	.	.	.	.	1	-1	-1	1
$\chi_{24}^{(77)}$	1	1	1	1	-2	-2	-2	-2	-2	-2	-2	-2	1	1	1	1	1	1	1	1	
$\chi_{24}^{(78)}$	-1	-1	-1	-1	2	2	2	2	2	2	2	2	2	2	2	2	2	-1	-1	-1	-1
$\chi_{24}^{(79)}$	1	1	-1	-1	-2	-2	2	2	-2	-2	2	2	1	1	-1	-1	1	1	-1	-1	
$\chi_{24}^{(80)}$	-1	-1	1	1	2	2	-2	-2	2	2	-2	-2	2	2	-2	-2	-1	-1	1	1	
$\chi_{24}^{(81)}$	-1	1	-1	1	-2	2	-2	2	2	-2	2	-2	1	-1	1	-1	1	-1	1	-1	
$\chi_{24}^{(82)}$	1	-1	1	-1	2	-2	2	-2	-2	2	-2	2	2	-2	2	-2	-1	1	-1	1	
$\chi_{24}^{(83)}$	-1	1	1	-1	-2	2	2	-2	2	-2	-2	2	1	-1	-1	1	1	-1	-1	1	
$\chi_{24}^{(84)}$	1	-1	-1	1	2	-2	-2	2	-2	2	2	-2	2	-2	-2	2	-1	1	1	-1	
$\chi_{24}^{(85)}$	-1	-1	-1	-1	-4	-4	-4	-4	4	4	4	4	.	.	.	.	1	1	1	1
$\chi_{24}^{(86)}$	-1	-1	1	1	-4	-4	4	4	4	4	-4	-4	.	.	.	.	1	1	-1	-1
$\chi_{24}^{(87)}$	1	-1	1	-1	-4	4	-4	4	-4	4	-4	4	.	.	.	.	1	-1	1	-1
$\chi_{24}^{(88)}$	1	-1	-1	1	-4	4	4	-4	-4	4	4	-4	1	-1	-1	1	
$\chi_{24}^{(89)}$	-1	-1	-1	-1	4	4	4	4	-4	-4	-4	-4	-1	-1	-1	-1	
$\chi_{24}^{(90)}$	-1	-1	1	1	4	4	-4	-4	-4	-4	4	4	-1	-1	1	1	

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$\chi_{24}^{(91)}$	1	-1	1	-1	4	-4	4	-4	4	-4	4	-4	-1	1	-1	1
$\chi_{24}^{(92)}$	1	-1	-1	1	4	-4	-4	4	4	-4	-4	4	-1	1	1	-1
$\chi_{24}^{(93)}$	-2	-2	-2	-2	1	1	1	1
$\chi_{24}^{(94)}$	-2	-2	2	2	1	1	-1	-1
$\chi_{24}^{(95)}$	2	-2	2	-2	.	.	.	.	.	.	.	.	1	-1	1	-1	.	.	.	.
$\chi_{24}^{(96)}$	2	-2	-2	2	.	.	.	.	.	.	.	.	1	-1	-1	1	.	.	.	.
$\chi_{24}^{(97)}$	.	.	.	.	3	3	3	3	3	3	3	3	.	.	.	.	.	.	.	.
$\chi_{24}^{(98)}$	.	.	.	.	3	3	-3	-3	3	3	-3	-3	.	.	.	.	.	.	.	.
$\chi_{24}^{(99)}$	.	.	.	.	3	-3	3	-3	-3	3	-3	3	.	.	.	.	.	.	.	.
$\chi_{24}^{(100)}$	.	.	.	.	3	-3	-3	3	-3	3	3	-3	.	.	.	.	.	.	.	.
$\chi_{24}^{(101)}$	2	2	2	2	.	.	.	.	.	.	.	.	-2	-2	-2	-2	.	.	.	.
$\chi_{24}^{(102)}$	2	2	-2	-2	.	.	.	.	.	.	.	.	-2	-2	2	2	.	.	.	.
$\chi_{24}^{(103)}$	-2	2	-2	2	.	.	.	.	.	.	.	.	-2	2	-2	2	.	.	.	.
$\chi_{24}^{(104)}$	-2	2	2	-2	.	.	.	.	.	.	.	.	-2	2	2	-2	.	.	.	.
$\chi_{24}^{(105)}$	-1	-1	-1	-1	2	2	2	2	2	2	2	2	.	.	.	.	-1	-1	-1	-1
$\chi_{24}^{(106)}$	-1	-1	1	1	2	2	-2	-2	2	2	-2	-2	.	.	.	.	-1	-1	1	1
$\chi_{24}^{(107)}$	1	-1	1	-1	2	-2	2	-2	-2	2	-2	2	.	.	.	.	-1	1	-1	1
$\chi_{24}^{(108)}$	1	-1	-1	1	2	-2	-2	2	-2	2	2	-2	.	.	.	.	-1	1	1	-1
$\chi_{24}^{(109)}$	.	.	.	.	-3	-3	-3	-3	-3	-3	-3	-3	.	.	.	.	.	.	.	.
$\chi_{24}^{(110)}$	.	.	.	.	-3	-3	3	3	-3	-3	3	3	.	.	.	.	.	.	.	.
$\chi_{24}^{(111)}$	.	.	.	.	-3	3	-3	3	3	-3	3	-3	.	.	.	.	.	.	.	.
$\chi_{24}^{(112)}$	.	.	.	.	-3	3	3	-3	3	-3	-3	3	.	.	.	.	.	.	.	.
$\chi_{24}^{(113)}$	.	.	.	.	.	.	.	.	.	.	.	.	1	1	1	1	.	.	.	.
$\chi_{24}^{(114)}$	.	.	.	.	.	.	.	.	.	.	.	.	1	1	-1	-1	.	.	.	.
$\chi_{24}^{(115)}$	.	.	.	.	.	.	.	.	.	.	.	.	1	-1	1	-1	.	.	.	.
$\chi_{24}^{(116)}$	.	.	.	.	.	.	.	.	.	.	.	.	1	-1	-1	1	.	.	.	.
$\chi_{24}^{(117)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{24}^{(118)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{24}^{(119)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{24}^{(120)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

The generators of $G^{s_{25}}$ are:

$$\begin{pmatrix} 1 & -1 & 1 & -1 & 1 & 0 & 0 & -1 \\ 1 & -1 & 1 & -1 & 1 & 0 & 1 & -3 \\ 2 & -2 & 1 & -1 & 1 & 1 & 0 & -3 \\ 3 & -2 & 1 & -2 & 2 & 1 & 1 & -5 \\ 3 & -2 & 0 & -1 & 2 & 0 & 1 & -4 \\ 2 & -2 & 0 & 0 & 1 & 0 & 1 & -3 \\ 1 & -2 & 0 & 0 & 1 & 0 & 1 & -2 \\ 1 & -1 & 0 & 0 & 0 & 0 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 1 & 0 & -1 & 1 & 0 & -1 & 1 & 0 \\ 1 & -1 & 0 & 1 & 0 & -1 & 1 & 0 \\ 1 & -1 & -1 & 2 & 0 & -1 & 1 & 0 \\ 1 & -1 & -1 & 2 & 0 & -1 & 1 & -1 \\ 1 & -1 & -1 & 2 & -1 & 0 & 1 & -1 \\ 0 & 0 & 0 & 1 & -1 & 0 & 1 & -1 \\ 0 & 0 & 0 & 1 & -1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & -1 & 0 & 1 & -1 & 1 & 0 \\ 1 & 0 & -1 & 1 & 0 & -1 & 1 & 0 \\ 1 & -1 & -1 & 1 & 1 & -2 & 2 & 0 \\ 1 & -1 & -2 & 2 & 1 & -2 & 2 & 0 \\ 1 & -1 & -2 & 2 & 1 & -2 & 2 & -1 \\ 1 & -1 & -2 & 2 & 0 & -1 & 2 & -1 \\ 0 & 0 & -1 & 1 & 0 & -1 & 2 & -1 \\ 0 & 0 & -1 & 1 & 0 & -1 & 1 & 0 \end{pmatrix}.$$

$$\begin{pmatrix}
1 & 2 & -1 & -1 & 1 & -1 & 0 & 0 \\
2 & 3 & -1 & -2 & 1 & 0 & -1 & 0 \\
2 & 4 & -1 & -3 & 2 & -1 & 0 & -1 \\
4 & 5 & -2 & -4 & 3 & -1 & -1 & -1 \\
3 & 4 & -1 & -4 & 3 & -1 & -1 & 0 \\
2 & 3 & -1 & -3 & 3 & -1 & -1 & 0 \\
2 & 2 & -1 & -2 & 2 & -1 & 0 & 0 \\
1 & 1 & -1 & -1 & 1 & 0 & 0 & 0
\end{pmatrix}, \quad
\begin{pmatrix}
1 & 2 & -1 & -1 & 1 & -1 & 0 & 0 \\
3 & 2 & -2 & -1 & 1 & -1 & 0 & 0 \\
3 & 3 & -2 & -2 & 2 & -2 & 1 & -1 \\
5 & 4 & -3 & -3 & 3 & -2 & 0 & -1 \\
4 & 3 & -2 & -2 & 2 & -2 & 0 & -1 \\
3 & 2 & -2 & -1 & 2 & -2 & 0 & -1 \\
2 & 2 & -1 & -1 & 1 & -1 & 0 & -1 \\
1 & 1 & -1 & 0 & 0 & 0 & 0 & -1
\end{pmatrix}, \quad
\begin{pmatrix}
1 & 2 & 0 & -1 & 0 & 0 & -1 & 0 \\
2 & 3 & -1 & -2 & 1 & 0 & -1 & 0 \\
2 & 4 & 0 & -3 & 1 & 0 & -1 & -1 \\
4 & 5 & -1 & -4 & 2 & 0 & -2 & -1 \\
3 & 4 & 0 & -4 & 2 & 0 & -2 & 0 \\
2 & 3 & 0 & -3 & 2 & 0 & -2 & 0 \\
2 & 2 & 0 & -2 & 1 & 0 & -1 & 0 \\
1 & 1 & 0 & -1 & 0 & 1 & -1 & 0
\end{pmatrix},$$

$$\begin{pmatrix}
1 & 2 & 0 & -1 & 0 & 0 & -1 & 0 \\
3 & 2 & -1 & -1 & 0 & 0 & -1 & 0 \\
3 & 3 & 0 & -2 & 0 & 0 & -1 & -1 \\
5 & 4 & -1 & -3 & 1 & 0 & -2 & -1 \\
4 & 3 & -1 & -2 & 1 & -1 & -1 & -1 \\
3 & 2 & -1 & -1 & 1 & -1 & -1 & -1 \\
2 & 2 & -1 & -1 & 1 & -1 & 0 & -1 \\
1 & 1 & -1 & 0 & 0 & 0 & 0 & -1
\end{pmatrix}, \quad
\begin{pmatrix}
2 & 1 & 0 & -1 & 0 & 0 & -1 & 1 \\
3 & 2 & -1 & -1 & 0 & 0 & -1 & 0 \\
4 & 2 & 0 & -2 & 0 & 0 & -1 & 0 \\
6 & 3 & -1 & -3 & 1 & 0 & -2 & 0 \\
5 & 2 & -1 & -2 & 1 & -1 & -1 & 0 \\
4 & 1 & -1 & -1 & 1 & -1 & -1 & 0 \\
3 & 1 & -1 & -1 & 1 & -1 & 0 & 0 \\
2 & 0 & -1 & 0 & 0 & 0 & 0 & 0
\end{pmatrix}.$$

The character table of $G^{s_{25}}$:

	10										20									
$\chi_{25}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{25}^{(2)}$	1	-1	-1	1	1	-1	1	-1	1	-1	-1	1	-1	1	-1	-1	1	-1	1	-1
$\chi_{25}^{(3)}$	1	-1	-1	1	1	1	-1	1	-1	1	-1	-1	1	1	-1	1	-1	-1	1	-1
$\chi_{25}^{(4)}$	1	-1	1	-1	1	-1	1	1	-1	1	-1	1	1	-1	1	-1	1	-1	1	-1
$\chi_{25}^{(5)}$	1	-1	1	-1	1	1	-1	-1	1	-1	1	-1	1	-1	1	-1	1	1	-1	-1
$\chi_{25}^{(6)}$	1	1	-1	-1	1	-1	-1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1
$\chi_{25}^{(7)}$	1	1	-1	-1	1	1	1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	1
$\chi_{25}^{(8)}$	1	1	1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	1	-1	-1	1	-1
$\chi_{25}^{(9)}$	1	A	A	-A	-A	-1	1	-1	1	-B	B	/A	-/A	B	-B	-/B	/B	/A	-/A	/B
$\chi_{25}^{(10)}$	1	B	B	-B	-B	-1	1	-1	1	-/A	/A	/B	-/B	/A	-/A	-A	A	/B	-/B	A
$\chi_{25}^{(11)}$	1	/B	/B	-/B	-/B	-1	1	-1	1	-A	A	B	-B	A	-A	-/A	/A	B	-B	/A
$\chi_{25}^{(12)}$	1	/A	/A	-/A	-/A	-1	1	-1	1	-/B	/B	A	-A	/B	-/B	-B	B	A	-A	B
$\chi_{25}^{(13)}$	1	A	A	-A	-A	1	-1	1	-1	-B	B	-/A	/A	B	-B	-/B	/B	-/A	/A	/B
$\chi_{25}^{(14)}$	1	B	B	-B	-B	1	-1	1	-1	-/A	/A	-/B	/B	/A	-/A	-A	A	-/B	/B	A
$\chi_{25}^{(15)}$	1	/B	/B	-/B	-/B	1	-1	1	-1	-A	A	-B	B	A	-A	-/A	/A	-B	B	/A
$\chi_{25}^{(16)}$	1	/A	/A	-/A	-/A	1	-1	1	-1	-/B	/B	-A	A	/B	-/B	-B	B	-A	A	B
$\chi_{25}^{(17)}$	1	A	-A	A	-A	-1	1	1	-1	-B	B	/A	-/A	-B	B	-/B	/B	-/A	/A	-/B
$\chi_{25}^{(18)}$	1	B	-B	B	-B	-1	1	1	-1	-/A	/A	/B	-/B	-/A	/A	-A	A	-/B	/B	-A
$\chi_{25}^{(19)}$	1	/B	-/B	/B	-/B	-1	1	1	-1	-A	A	B	-B	-A	A	-/A	/A	-B	B	-/A
$\chi_{25}^{(20)}$	1	/A	-/A	/A	-/A	-1	1	1	-1	-/B	/B	A	-A	-/B	/B	-B	B	-A	A	-B
$\chi_{25}^{(21)}$	1	A	-A	A	-A	1	-1	-1	1	-B	B	-/A	/A	-B	B	-/B	/B	/A	-/A	-/B
$\chi_{25}^{(22)}$	1	B	-B	B	-B	1	-1	-1	1	-/A	/A	-/B	/B	-/A	/A	-A	A	/B	-/B	-A
$\chi_{25}^{(23)}$	1	/B	-/B	/B	-/B	1	-1	-1	1	-A	A	-B	B	-A	A	-/A	/A	B	-B	-/A
$\chi_{25}^{(24)}$	1	/A	-/A	/A	-/A	1	-1	-1	1	-/B	/B	-A	A	-/B	/B	-B	B	A	-A	-B
$\chi_{25}^{(25)}$	1	-A	A	A	-A	-1	-1	1	1	-B	-B	/A	/A	B	B	-/B	-/B	-/A	-/A	/B
$\chi_{25}^{(26)}$	1	-B	B	B	-B	-1	-1	1	1	-/A	-/A	/B	/B	/A	/A	-A	-A	-/B	-/B	A
$\chi_{25}^{(27)}$	1	-/B	/B	/B	-/B	-1	-1	1	1	-A	-A	B	B	A	A	-/A	-/A	-B	-B	/A
$\chi_{25}^{(28)}$	1	-/A	/A	/A	-/A	-1	-1	1	1	-/B	-/B	A	A	/B	/B	-B	-B	-A	-A	B
$\chi_{25}^{(29)}$	1	-A	A	A	-A	1	1	-1	-1	-B	-B	-/A	-/A	B	B	-/B	-/B	/A	/A	/B
$\chi_{25}^{(30)}$	1	-B	B	B	-B	1	1	-1	-1	-/A	-/A	-/B	-/B	/A	/A	-A	-A	/B	/B	A
$\chi_{25}^{(31)}$	1	-/B	/B	/B	-/B	1	1	-1	-1	-A	-A	-B	-B	A	A	-/A	-/A	B	B	/A
$\chi_{25}^{(32)}$	1	-/A	/A	/A	-/A	1	1	-1	-1	-/B	-/B	-A	-A	/B	/B	-B	-B	A	A	B
$\chi_{25}^{(33)}$	1	-A	-A	-A	-A	-1	-1	-1	-1	-B	-B	/A	/A	-B	-B	-/B	-/B	/A	/A	-/B
$\chi_{25}^{(34)}$	1	-B	-B	-B	-B	-1	-1	-1	-1	-/A	-/A	/B	/B	-/A	-/A	-A	-A	/B	/B	-A
$\chi_{25}^{(35)}$	1	-/B	-/B	-/B	-/B	-1	-1	-1	-1	-A	-A	B	B	-A	-A	-/A	-/A	B	B	-/A
$\chi_{25}^{(36)}$	1	-/A	-/A	-/A	-/A	-1	-1	-1	-1	-/B	-/B	A	A	-/B	-/B	-B	-B	A	A	-B
$\chi_{25}^{(37)}$	1	-A	-A	-A	-A	1	1	1	1	-B	-B	-/A	-/A	-B	-B	-/B	-/B	-/A	-/A	-/B
$\chi_{25}^{(38)}$	1	-B	-B	-B	-B	1	1	1	1	-/A	-/A	-/B	-/B	-/A	-/A	-A	-A	-/B	-/B	-A
$\chi_{25}^{(39)}$	1	-/B	-/B	-/B	-/B	1	1	1	1	-A	-A	-B	-B	-A	-A	-/A	-/A	-B	-B	-/A
$\chi_{25}^{(40)}$	1	-/A	-/A	-/A	-/A	1	1	1	1	-/B	-/B	-A	-A	-/B	-/B	-B	-B	-A	-A	-B
$\chi_{25}^{(41)}$	2	.	.	.	2	.	2	.	.	-2	.	.	2	.	.	-2	.	.	.	-2
$\chi_{25}^{(42)}$	2	.	.	.	2	.	-2	.	.	-2	.	.	-2	.	.	-2	.	.	.	2
$\chi_{25}^{(43)}$	2	.	.	.	C	.	2	.	.	-D	.	.	/C	.	.	-/D	.	.	.	-2
$\chi_{25}^{(44)}$	2	.	.	.	D	.	2	.	.	-/C	.	.	/D	.	.	-C	.	.	.	-2
$\chi_{25}^{(45)}$	2	.	.	.	/D	.	2	.	.	-C	.	.	D	.	.	-/C	.	.	.	-2
$\chi_{25}^{(46)}$	2	.	.	.	/C	.	2	.	.	-/D	.	.	C	.	.	-D	.	.	.	-2
$\chi_{25}^{(47)}$	2	.	.	.	C	.	-2	.	.	-D	.	.	-/C	.	.	-/D	.	.	.	2
$\chi_{25}^{(48)}$	2	.	.	.	D	.	-2	.	.	-/C	.	.	-/D	.	.	-C	.	.	.	2
$\chi_{25}^{(49)}$	2	.	.	.	/D	.	-2	.	.	-C	.	.	-D	.	.	-/C	.	.	.	2
$\chi_{25}^{(50)}$	2	.	.	.	/C	.	-2	.	.	-/D	.	.	-C	.	.	-D	.	.	.	2

	30										40											
$\chi_{25}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
$\chi_{25}^{(2)}$	1	-1	-1	1	-1	1	-1	1	1	-1	1	1	1	-1	-1	1	1	1	1	1	-1	1
$\chi_{25}^{(3)}$	1	-1	1	-1	1	-1	-1	1	1	1	-1	-1	1	1	-1	-1	1	-1	1	-1	1	-1
$\chi_{25}^{(4)}$	1	-1	1	-1	-1	1	1	-1	1	1	-1	1	1	1	-1	1	-1	1	1	1	1	-1
$\chi_{25}^{(5)}$	1	-1	-1	1	1	-1	1	-1	1	-1	1	-1	1	1	-1	1	-1	-1	1	-1	1	-1
$\chi_{25}^{(6)}$	1	1	1	1	-1	-1	-1	-1	1	1	1	-1	1	1	1	-1	-1	-1	1	-1	1	-1
$\chi_{25}^{(7)}$	1	1	-1	-1	1	1	-1	-1	1	-1	-1	1	1	1	1	-1	-1	1	1	1	1	1
$\chi_{25}^{(8)}$	1	1	-1	-1	-1	-1	1	1	1	-1	-1	-1	1	1	1	1	1	-1	1	-1	1	-1
$\chi_{25}^{(9)}$	-/A	/A	/B	-/B	B	-B	/A	-/A	-B	B	-B	-/A	-/B	1	-1	-1	1	-/B	-/A	-B	-A	A
$\chi_{25}^{(10)}$	-/B	/B	A	-A	/A	-/A	/B	-/B	-/A	/A	-/A	-/B	-A	1	-1	-1	1	-A	-/B	-/A	-B	B
$\chi_{25}^{(11)}$	-B	B	/A	-/A	A	-A	B	-B	-A	A	-A	-B	-/A	1	-1	-1	1	-/A	-B	-A	-/B	/B
$\chi_{25}^{(12)}$	-A	A	B	-B	/B	-/B	A	-A	-/B	/B	-/B	-A	-B	1	-1	-1	1	-B	-A	-/B	-/A	/A
$\chi_{25}^{(13)}$	-/A	/A	-/B	/B	-B	B	/A	-/A	-B	-B	B	/A	-/B	1	-1	-1	1	/B	-/A	B	-A	-A
$\chi_{25}^{(14)}$	-/B	/B	-A	A	-/A	/A	/B	-/B	-/A	-/A	/A	/B	-A	1	-1	-1	1	A	-/B	/A	-B	B
$\chi_{25}^{(15)}$	-B	B	-/A	/A	-A	A	B	-B	-A	-A	A	B	-/A	1	-1	-1	1	/A	-B	A	-/B	/B
$\chi_{25}^{(16)}$	-A	A	-B	B	-/B	/B	A	-A	-/B	-/B	/B	A	-B	1	-1	-1	1	B	-A	/B	-/A	/A
$\chi_{25}^{(17)}$	-/A	/A	-/B	/B	B	-B	-/A	/A	-B	-B	B	-/A	-/B	1	-1	1	-1	-/B	-/A	-B	-A	-A
$\chi_{25}^{(18)}$	-/B	/B	-A	A	/A	-/A	-/B	/B	-/A	-/A	/A	-/B	-A	1	-1	1	-1	-A	-/B	-/A	-B	B
$\chi_{25}^{(19)}$	-B	B	-/A	/A	A	-A	-B	B	-A	-A	A	-B	-/A	1	-1	1	-1	-/A	-B	-A	-/B	/B
$\chi_{25}^{(20)}$	-A	A	-B	B	/B	-/B	-A	A	-/B	-/B	/B	-A	-B	1	-1	1	-1	-B	-A	-/B	-/A	/A
$\chi_{25}^{(21)}$	-/A	/A	/B	-/B	-B	B	-/A	/A	-B	B	-B	/A	-/B	1	-1	1	-1	/B	-/A	B	-A	-A
$\chi_{25}^{(22)}$	-/B	/B	A	-A	-/A	/A	-/B	/B	-/A	/A	-/A	/B	-A	1	-1	1	-1	A	-/B	/A	-B	B
$\chi_{25}^{(23)}$	-B	B	/A	-/A	-A	A	-B	B	-A	A	-A	B	-/A	1	-1	1	-1	/A	-B	A	-/B	/B
$\chi_{25}^{(24)}$	-A	A	B	-B	-/B	/B	-A	A	-/B	/B	-/B	A	-B	1	-1	1	-1	B	-A	/B	-/A	/A
$\chi_{25}^{(25)}$	-/A	-/A	-/B	-/B	B	B	/A	/A	-B	-B	-B	/A	-/B	1	1	-1	-1	/B	-/A	B	-A	A
$\chi_{25}^{(26)}$	-/B	-/B	-A	-A	/A	/A	/B	/B	-/A	-/A	-/A	/B	-A	1	1	-1	-1	A	-/B	/A	-B	B
$\chi_{25}^{(27)}$	-B	-B	-/A	-/A	A	A	B	B	-A	-A	-A	B	-/A	1	1	-1	-1	/A	-B	A	-/B	/B
$\chi_{25}^{(28)}$	-A	-A	-B	-B	/B	/B	A	A	-/B	-/B	-/B	A	-B	1	1	-1	-1	B	-A	/B	-/A	/A
$\chi_{25}^{(29)}$	-/A	-/A	/B	/B	-B	-B	/A	/A	-B	B	B	-/A	-/B	1	1	-1	-1	-/B	-/A	-B	-A	-A
$\chi_{25}^{(30)}$	-/B	-/B	A	A	-/A	-/A	/B	/B	-/A	/A	/A	-/B	-A	1	1	-1	-1	-A	-/B	-/A	-B	-B
$\chi_{25}^{(31)}$	-B	-B	/A	/A	-A	-A	B	B	-A	A	A	-B	-/A	1	1	-1	-1	-/A	-B	-A	-/B	-/B
$\chi_{25}^{(32)}$	-A	-A	B	B	-/B	-/B	A	A	-/B	/B	/B	-A	-B	1	1	-1	-1	-B	-A	-/B	-/A	-/A
$\chi_{25}^{(33)}$	-/A	-/A	/B	/B	B	B	-/A	-/A	-B	B	B	/A	-/B	1	1	1	1	/B	-/A	B	-A	A
$\chi_{25}^{(34)}$	-/B	-/B	A	A	/A	/A	-/B	-/B	-/A	/A	/A	/B	-A	1	1	1	1	A	-/B	/A	-B	B
$\chi_{25}^{(35)}$	-B	-B	/A	/A	A	A	-B	-B	-A	A	A	B	-/A	1	1	1	1	/A	-B	A	-/B	/B
$\chi_{25}^{(36)}$	-A	-A	B	B	/B	/B	-A	-A	-/B	/B	/B	A	-B	1	1	1	1	B	-A	/B	-/A	/A
$\chi_{25}^{(37)}$	-/A	-/A	-/B	-/B	-B	-B	-/A	-/A	-B	-B	-B	-/A	-/B	1	1	1	1	-/B	-/A	-B	-A	-A
$\chi_{25}^{(38)}$	-/B	-/B	-A	-A	-/A	-/A	-/B	-/B	-/A	-/A	-/A	-/B	-A	1	1	1	1	-A	-/B	-/A	-B	-B
$\chi_{25}^{(39)}$	-B	-B	-/A	-/A	-A	-A	-B	-B	-A	-A	-A	-B	-/A	1	1	1	1	-/A	-B	-A	-/B	-/B
$\chi_{25}^{(40)}$	-A	-A	-B	-B	-/B	-/B	-A	-A	-/B	-/B	-/B	-A	-B	1	1	1	1	-B	-A	-/B	-/A	-/A
$\chi_{25}^{(41)}$	-2	.	.	.	.	2	.	.	2	.	.	-2	2	-2	.	.	.	-2	2	-2	-2	2
$\chi_{25}^{(42)}$	-2	.	.	.	.	-2	.	.	2	.	.	2	2	-2	.	.	.	2	2	2	-2	-2
$\chi_{25}^{(43)}$	-/C	.	.	.	.	D	.	.	D	.	.	-/C	/D	-2	.	.	.	-/D	/C	-D	-C	C
$\chi_{25}^{(44)}$	-/D	.	.	.	.	/C	.	.	/C	.	.	-/D	C	-2	.	.	.	-C	/D	-/C	-D	D
$\chi_{25}^{(45)}$	-D	.	.	.	.	C	.	.	C	.	.	-D	/C	-2	.	.	.	-/C	D	-C	-/D	/D
$\chi_{25}^{(46)}$	-C	.	.	.	.	/D	.	.	/D	.	.	-C	D	-2	.	.	.	-D	C	-/D	-/C	/C
$\chi_{25}^{(47)}$	-/C	.	.	.	.	-D	.	.	D	.	.	/C	/D	-2	.	.	.	/D	/C	D	-C	-C
$\chi_{25}^{(48)}$	-/D	.	.	.	.	-/C	.	.	/C	.	.	/D	C	-2	.	.	.	C	/D	/C	-D	-D
$\chi_{25}^{(49)}$	-D	.	.	.	.	-C	.	.	C	.	.	D	/C	-2	.	.	.	/C	D	C	-/D	-/D
$\chi_{25}^{(50)}$	-C	.	.	.	.	-/D	.	.	/D	.	.	C	D	-2	.	.	.	D	C	/D	-/C	-/C

	50		
$\chi_{25}^{(1)}$	1	1	1
$\chi_{25}^{(2)}$	-1	1	1
$\chi_{25}^{(3)}$	1	-1	-1
$\chi_{25}^{(4)}$	1	-1	1
$\chi_{25}^{(5)}$	-1	1	-1
$\chi_{25}^{(6)}$	1	1	-1
$\chi_{25}^{(7)}$	-1	-1	1
$\chi_{25}^{(8)}$	-1	-1	-1
$\chi_{25}^{(9)}$	A	-A	-A
$\chi_{25}^{(10)}$	B	-B	-B
$\chi_{25}^{(11)}$	/B	-/B	-/B
$\chi_{25}^{(12)}$	/A	-/A	-/A
$\chi_{25}^{(13)}$	-A	A	A
$\chi_{25}^{(14)}$	-B	B	B
$\chi_{25}^{(15)}$	-/B	/B	/B
$\chi_{25}^{(16)}$	-/A	/A	/A
$\chi_{25}^{(17)}$	-A	A	-A
$\chi_{25}^{(18)}$	-B	B	-B
$\chi_{25}^{(19)}$	-/B	/B	-/B
$\chi_{25}^{(20)}$	-/A	/A	-/A
$\chi_{25}^{(21)}$	A	-A	A
$\chi_{25}^{(22)}$	B	-B	B
$\chi_{25}^{(23)}$	/B	-/B	/B
$\chi_{25}^{(24)}$	/A	-/A	/A
$\chi_{25}^{(25)}$	-A	-A	A
$\chi_{25}^{(26)}$	-B	-B	B
$\chi_{25}^{(27)}$	-/B	-/B	/B
$\chi_{25}^{(28)}$	-/A	-/A	/A
$\chi_{25}^{(29)}$	A	A	-A
$\chi_{25}^{(30)}$	B	B	-B
$\chi_{25}^{(31)}$	/B	/B	-/B
$\chi_{25}^{(32)}$	/A	/A	-/A
$\chi_{25}^{(33)}$	A	A	A
$\chi_{25}^{(34)}$	B	B	B
$\chi_{25}^{(35)}$	/B	/B	/B
$\chi_{25}^{(36)}$	/A	/A	/A
$\chi_{25}^{(37)}$	-A	-A	-A
$\chi_{25}^{(38)}$	-B	-B	-B
$\chi_{25}^{(39)}$	-/B	-/B	-/B
$\chi_{25}^{(40)}$	-/A	-/A	-/A
$\chi_{25}^{(41)}$	.	.	-2
$\chi_{25}^{(42)}$	.	.	2
$\chi_{25}^{(43)}$	.	.	-C
$\chi_{25}^{(44)}$	.	.	-D
$\chi_{25}^{(45)}$	.	.	-/D
$\chi_{25}^{(46)}$	.	.	-/C
$\chi_{25}^{(47)}$	.	.	C
$\chi_{25}^{(48)}$	.	.	D
$\chi_{25}^{(49)}$	.	.	/D

[illegible]

$$\begin{pmatrix} -1 & 1 & 1 & 0 & -1 & 0 & -1 & 1 \\ -1 & 2 & 1 & -1 & 0 & -1 & -1 & 2 \\ -2 & 3 & 2 & -1 & -1 & -1 & -1 & 2 \\ -2 & 4 & 3 & -2 & -1 & -2 & -1 & 3 \\ -2 & 3 & 3 & -2 & -1 & -1 & -1 & 3 \\ -1 & 3 & 2 & -2 & -1 & 0 & -1 & 2 \\ 0 & 2 & 1 & -1 & -1 & 0 & -1 & 2 \\ 0 & 1 & 1 & -1 & 0 & 0 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 1 & 1 & 0 & 0 & -2 & 1 & 0 & 1 \\ 1 & 2 & 0 & 0 & -3 & 1 & 1 & 0 \\ 1 & 2 & 1 & 0 & -4 & 1 & 1 & 1 \\ 2 & 4 & 1 & -1 & -5 & 1 & 2 & 1 \\ 2 & 3 & 0 & 0 & -4 & 0 & 2 & 1 \\ 2 & 2 & 0 & 0 & -3 & 0 & 1 & 1 \\ 1 & 1 & 0 & 0 & -2 & 0 & 1 & 1 \\ 1 & 0 & 0 & 0 & -1 & 0 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -2 & 1 & 0 & 1 & 0 & -1 & 0 \\ -1 & -2 & 1 & 0 & 2 & 0 & -2 & 0 \\ 0 & -3 & 1 & 0 & 2 & 1 & -3 & 0 \\ -1 & -5 & 1 & 1 & 3 & 1 & -4 & 0 \\ -1 & -4 & 1 & 0 & 3 & 1 & -3 & 0 \\ -1 & -3 & 1 & 0 & 2 & 1 & -2 & 0 \\ 0 & -2 & 0 & 0 & 2 & 0 & -1 & 0 \\ 0 & -1 & 0 & 0 & 1 & 0 & -1 & 1 \end{pmatrix}, \\
\begin{pmatrix} 1 & -1 & 0 & 0 & 0 & 1 & -2 & 1 \\ 1 & 0 & 0 & -1 & 1 & 1 & -3 & 1 \\ 2 & -1 & 0 & -1 & 1 & 2 & -4 & 1 \\ 3 & -1 & 0 & -2 & 2 & 2 & -5 & 1 \\ 2 & -1 & 0 & -2 & 2 & 2 & -4 & 1 \\ 2 & 0 & 0 & -2 & 1 & 2 & -3 & 1 \\ 2 & 0 & -1 & -1 & 1 & 1 & -2 & 1 \\ 1 & 0 & 0 & -1 & 1 & 0 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 1 & 1 & -2 & 0 & 0 & 1 & 0 & -1 \\ 2 & 1 & -2 & 0 & -1 & 2 & 0 & -2 \\ 2 & 1 & -3 & 0 & 0 & 2 & 0 & -3 \\ 4 & 2 & -4 & -1 & 0 & 3 & 0 & -4 \\ 4 & 1 & -4 & 0 & 0 & 2 & 0 & -3 \\ 3 & 1 & -3 & 0 & 0 & 1 & 0 & -2 \\ 2 & 0 & -2 & 0 & 0 & 1 & 0 & -1 \\ 1 & 0 & -1 & 0 & 0 & 0 & 1 & -1 \end{pmatrix}, \begin{pmatrix} -2 & 0 & 1 & 0 & 1 & -2 & 1 & 0 \\ -3 & 0 & 2 & 0 & 1 & -2 & 0 & 1 \\ -4 & 1 & 2 & 0 & 1 & -3 & 1 & 1 \\ -6 & 0 & 3 & 1 & 1 & -4 & 1 & 2 \\ -5 & 0 & 3 & 0 & 1 & -3 & 1 & 2 \\ -4 & 0 & 2 & 0 & 1 & -2 & 1 & 1 \\ -2 & 0 & 1 & 0 & 1 & -2 & 1 & 1 \\ -1 & 0 & 0 & 0 & 1 & -1 & 0 & 1 \end{pmatrix}, \\
\begin{pmatrix} -1 & 1 & 0 & 0 & 0 & -1 & 0 & 1 \\ -1 & 2 & 1 & -1 & 0 & -1 & -1 & 2 \\ -2 & 3 & 1 & -1 & 0 & -2 & 0 & 2 \\ -2 & 4 & 2 & -2 & 0 & -3 & 0 & 3 \\ -2 & 3 & 2 & -2 & 0 & -2 & 0 & 3 \\ -1 & 3 & 1 & -2 & 0 & -1 & 0 & 2 \\ 0 & 2 & 0 & -1 & 0 & -1 & 0 & 2 \\ 0 & 1 & 0 & -1 & 1 & -1 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 2 & -1 & 0 & -1 & 0 & 1 & 0 \\ 1 & 2 & -1 & 0 & -2 & 0 & 2 & 0 \\ 0 & 3 & -1 & 0 & -2 & -1 & 3 & 0 \\ 1 & 5 & -1 & -1 & -3 & -1 & 4 & 0 \\ 1 & 4 & -1 & 0 & -3 & -1 & 3 & 0 \\ 1 & 3 & -1 & 0 & -2 & -1 & 2 & 0 \\ 0 & 2 & 0 & 0 & -2 & 0 & 1 & 0 \\ 0 & 1 & 0 & 0 & -1 & 0 & 1 & -1 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 0 & 0 & 2 & -1 & 0 & -1 \\ -1 & -2 & 0 & 0 & 3 & -1 & -1 & 0 \\ -1 & -2 & -1 & 0 & 4 & -1 & -1 & -1 \\ -2 & -4 & -1 & 1 & 5 & -1 & -2 & -1 \\ -2 & -3 & 0 & 0 & 4 & 0 & -2 & -1 \\ -2 & -2 & 0 & 0 & 3 & 0 & -1 & -1 \\ -1 & -1 & 0 & 0 & 2 & 0 & -1 & -1 \\ -1 & 0 & 0 & 0 & 1 & 0 & -1 & 0 \end{pmatrix}, \\
\begin{pmatrix} 0 & 0 & -1 & 0 & 1 & 0 & -1 & 0 \\ 1 & 0 & -1 & -1 & 2 & 0 & -2 & 1 \\ 1 & 0 & -2 & -1 & 3 & 0 & -2 & 0 \\ 2 & 0 & -2 & -2 & 4 & 0 & -3 & 0 \\ 1 & 0 & -1 & -2 & 3 & 1 & -3 & 0 \\ 1 & 1 & -1 & -2 & 2 & 1 & -2 & 0 \\ 1 & 1 & -1 & -1 & 1 & 1 & -2 & 0 \\ 0 & 1 & 0 & -1 & 1 & 0 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 1 & 0 & 0 & -1 & 0 & 0 & 1 \\ 0 & 2 & 0 & 0 & -1 & 0 & 0 & 1 \\ 0 & 2 & 1 & 0 & -2 & 0 & 0 & 2 \\ 0 & 4 & 1 & -1 & -2 & 0 & 0 & 3 \\ 0 & 3 & 0 & 0 & -2 & 0 & 0 & 3 \\ 0 & 2 & 0 & 0 & -1 & 0 & -1 & 3 \\ 0 & 1 & 0 & 0 & 0 & -1 & 0 & 2 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & -2 & 1 & 0 & 0 & 1 & -1 & 0 \\ -1 & -3 & 1 & 1 & 0 & 1 & -1 & -1 \\ 0 & -4 & 1 & 1 & 0 & 2 & -2 & -1 \\ 0 & -6 & 1 & 2 & 0 & 2 & -2 & -2 \\ 0 & -5 & 0 & 2 & 0 & 2 & -2 & -1 \\ 0 & -4 & 0 & 2 & -1 & 2 & -1 & -1 \\ 0 & -3 & 0 & 1 & 0 & 1 & 0 & -1 \\ 0 & -2 & 0 & 1 & 0 & 0 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 1 & 1 & -2 & 0 & 1 & 0 & 0 & -1 \\ 1 & 1 & -2 & 0 & 1 & 1 & -1 & -1 \\ 1 & 1 & -3 & 0 & 2 & 1 & -1 & -2 \\ 2 & 2 & -4 & -1 & 3 & 2 & -2 & -2 \\ 2 & 1 & -4 & 0 & 2 & 2 & -2 & -1 \\ 1 & 1 & -3 & 0 & 2 & 1 & -2 & 0 \\ 1 & 0 & -2 & 0 & 2 & 0 & -1 & 0 \\ 0 & 0 & -1 & 0 & 1 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 & -1 & 0 & 2 & -1 & -1 & 0 \\ 0 & 0 & 0 & -1 & 3 & -1 & -2 & 0 \\ 0 & 0 & -1 & -1 & 4 & -1 & -2 & -1 \\ 0 & 0 & -1 & -2 & 6 & -1 & -4 & 0 \\ 1 & 0 & -1 & -2 & 5 & -1 & -3 & 0 \\ 1 & 1 & -1 & -2 & 4 & -1 & -2 & 0 \\ 1 & 0 & -1 & -1 & 3 & -1 & -1 & 0 \\ 0 & 0 & 0 & -1 & 2 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 2 & -1 & 0 & 0 & -1 & 1 & 0 \\ 0 & 2 & -1 & 0 & 0 & -1 & 1 & 1 \\ -1 & 3 & -1 & 0 & 0 & -2 & 2 & 1 \\ -1 & 5 & -1 & -1 & 0 & -2 & 2 & 2 \\ -1 & 4 & -1 & 0 & -1 & -1 & 1 & 2 \\ -1 & 3 & -1 & 0 & 0 & -1 & 0 & 2 \\ -1 & 2 & 0 & 0 & 0 & -1 & 0 & 1 \\ -1 & 1 & 0 & 0 & 0 & 0 & 0 & 0 \end{pmatrix},
\end{pmatrix}$$

	10										20												
$\chi_{26}^{(46)}$	10	10	10	10	10	10	10	10	10	10	10	-10	-10	-10	-10	-10	-10	-10	-2	-2	-2	-2	-2
$\chi_{26}^{(47)}$	10	10	10	10	-10	-10	-10	10	10	10	10	-10	-10	-10	-10	10	10	10	2	2	2	2	2
$\chi_{26}^{(48)}$	10	10	10	10	-10	-10	-10	10	10	10	10	-10	-10	-10	-10	10	10	10	-2	-2	-2	-2	-2
$\chi_{26}^{(49)}$	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	2	2	2	2	2
$\chi_{26}^{(50)}$	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	-2	-2	-2	-2	-2
$\chi_{26}^{(51)}$	10	10	10	10	-10	-10	-10	10	10	10	10	10	10	10	10	-10	-10	-10	2	2	2	2	2
$\chi_{26}^{(52)}$	10	10	10	10	-10	-10	-10	10	10	10	10	10	10	10	10	-10	-10	-10	-2	-2	-2	-2	-2
$\chi_{26}^{(53)}$	10	10	10	10	.	.	.	-10	-10	-10	-10	.	.	.	.	.	.	.	2	2	2	2	2
$\chi_{26}^{(54)}$	10	10	10	10	.	.	.	-10	-10	-10	-10	.	.	.	.	.	.	.	-2	-2	-2	-2	-2
$\chi_{26}^{(55)}$	12	-12	4	-4	.	.	.	-12	12	-4	4	.	.	.	.	.	.	.	-8	8	-4	4	.
$\chi_{26}^{(56)}$	12	-12	4	-4	.	.	.	-12	12	-4	4	.	.	.	.	.	.	.	8	-8	4	-4	.
$\chi_{26}^{(57)}$	15	15	-1	-1	-5	-5	3	15	15	-1	-1	-15	-15	1	1	5	5	-3	-5	-5	-1	-1	3
$\chi_{26}^{(58)}$	15	15	-1	-1	-5	-5	3	15	15	-1	-1	-15	-15	1	1	5	5	-3	-7	-7	1	1	1
$\chi_{26}^{(59)}$	15	15	-1	-1	-5	-5	3	15	15	-1	-1	-15	-15	1	1	5	5	-3	5	5	1	1	-3
$\chi_{26}^{(60)}$	15	15	-1	-1	-5	-5	3	15	15	-1	-1	-15	-15	1	1	5	5	-3	7	7	-1	-1	-1
$\chi_{26}^{(61)}$	15	15	-1	-1	5	5	-3	15	15	-1	-1	-15	-15	1	1	-5	-5	3	-5	-5	-1	-1	3
$\chi_{26}^{(62)}$	15	15	-1	-1	5	5	-3	15	15	-1	-1	-15	-15	1	1	-5	-5	3	-7	-7	1	1	1
$\chi_{26}^{(63)}$	15	15	-1	-1	5	5	-3	15	15	-1	-1	-15	-15	1	1	-5	-5	3	5	5	1	1	-3
$\chi_{26}^{(64)}$	15	15	-1	-1	5	5	-3	15	15	-1	-1	-15	-15	1	1	-5	-5	3	7	7	-1	-1	-1
$\chi_{26}^{(65)}$	15	15	-1	-1	-5	-5	3	15	15	-1	-1	15	15	-1	-1	-5	-5	3	-5	-5	-1	-1	3
$\chi_{26}^{(66)}$	15	15	-1	-1	-5	-5	3	15	15	-1	-1	15	15	-1	-1	-5	-5	3	-7	-7	1	1	1
$\chi_{26}^{(67)}$	15	15	-1	-1	-5	-5	3	15	15	-1	-1	15	15	-1	-1	-5	-5	3	5	5	1	1	-3
$\chi_{26}^{(68)}$	15	15	-1	-1	-5	-5	3	15	15	-1	-1	15	15	-1	-1	-5	-5	3	7	7	-1	-1	-1
$\chi_{26}^{(69)}$	15	15	-1	-1	5	5	-3	15	15	-1	-1	15	15	-1	-1	5	5	-3	-5	-5	-1	-1	3
$\chi_{26}^{(70)}$	15	15	-1	-1	5	5	-3	15	15	-1	-1	15	15	-1	-1	5	5	-3	-7	-7	1	1	1
$\chi_{26}^{(71)}$	15	15	-1	-1	5	5	-3	15	15	-1	-1	15	15	-1	-1	5	5	-3	5	5	1	1	-3
$\chi_{26}^{(72)}$	15	15	-1	-1	5	5	-3	15	15	-1	-1	15	15	-1	-1	5	5	-3	7	7	-1	-1	-1
$\chi_{26}^{(73)}$	16	16	16	16	16	16	16	16	16	16	16	-16	-16	-16	-16	-16	-16	-16	.	.	.	.	.
$\chi_{26}^{(74)}$	16	16	16	16	-16	-16	-16	16	16	16	16	-16	-16	-16	-16	16	16	16	.	.	.	.	.
$\chi_{26}^{(75)}$	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	.	.	.	.	.
$\chi_{26}^{(76)}$	16	16	16	16	-16	-16	-16	16	16	16	16	16	16	16	16	-16	-16	-16	.	.	.	.	.
$\chi_{26}^{(77)}$	18	18	18	18	.	.	.	-18	-18	-18	-18	.	.	.	.	.	.	.	-6	-6	-6	-6	-6
$\chi_{26}^{(78)}$	18	18	18	18	.	.	.	-18	-18	-18	-18	.	.	.	.	.	.	.	6	6	6	6	6
$\chi_{26}^{(79)}$	20	-20	-4	4	.	.	.	20	-20	-4	4	-20	20	4	-4	.	.	.	-8	8	4	-4	.
$\chi_{26}^{(80)}$	20	-20	-4	4	.	.	.	20	-20	-4	4	-20	20	4	-4	.	.	.	8	-8	-4	4	.
$\chi_{26}^{(81)}$	20	-20	-4	4	.	.	.	20	-20	-4	4	20	-20	-4	4	.	.	.	-8	8	4	-4	.
$\chi_{26}^{(82)}$	20	-20	-4	4	.	.	.	20	-20	-4	4	20	-20	-4	4	.	.	.	8	-8	-4	4	.
$\chi_{26}^{(83)}$	20	-20	-4	4	.	.	.	20	-20	-4	4	-20	20	4	-4	.	.	.	.	.	.	.	.
$\chi_{26}^{(84)}$	20	-20	-4	4	.	.	.	20	-20	-4	4	-20	20	4	-4	.	.	.	.	.	.	.	.
$\chi_{26}^{(85)}$	20	-20	-4	4	.	.	.	20	-20	-4	4	20	-20	-4	4	.	.	.	.	.	.	.	.
$\chi_{26}^{(86)}$	20	-20	-4	4	.	.	.	20	-20	-4	4	20	-20	-4	4	.	.	.	.	.	.	.	.
$\chi_{26}^{(87)}$	20	20	20	20	.	.	.	-20	-20	-20	-20	.	.	.	.	.	.	.	4	4	4	4	4
$\chi_{26}^{(88)}$	20	20	20	20	.	.	.	-20	-20	-20	-20	.	.	.	.	.	.	.	-4	-4	-4	-4	-4
$\chi_{26}^{(89)}$	20	-20	-4	4	.	.	.	-20	20	4	-4	.	.	.	.	.	.	.	-8	8	4	-4	.
$\chi_{26}^{(90)}$	20	-20	-4	4	.	.	.	-20	20	4	-4	.	.	.	.	.	.	.	-8	8	4	-4	.

	10																20							
$\chi_{26}^{(91)}$	20	-20	-4	4	.	.	.	-20	20	4	-4	.	.	.	.	.	.	8	-8	-4	4	.	.	.
$\chi_{26}^{(92)}$	20	-20	-4	4	.	.	.	-20	20	4	-4	.	.	.	.	.	.	8	-8	-4	4	.	.	.
$\chi_{26}^{(93)}$	24	-24	8	-8	16	-16	.	24	-24	8	-8	-24	24	-8	8	-16	16	8	-8	4	-4	.	.	.
$\chi_{26}^{(94)}$	24	-24	8	-8	16	-16	.	24	-24	8	-8	-24	24	-8	8	-16	16	-8	8	-4	4	.	.	.
$\chi_{26}^{(95)}$	24	-24	8	-8	-16	16	.	24	-24	8	-8	-24	24	-8	8	16	-16	8	-8	4	-4	.	.	.
$\chi_{26}^{(96)}$	24	-24	8	-8	-16	16	.	24	-24	8	-8	-24	24	-8	8	16	-16	-8	8	-4	4	.	.	.
$\chi_{26}^{(97)}$	24	-24	8	-8	16	-16	.	24	-24	8	-8	24	-24	8	-8	16	-16	8	-8	4	-4	.	.	.
$\chi_{26}^{(98)}$	24	-24	8	-8	16	-16	.	24	-24	8	-8	24	-24	8	-8	16	-16	-8	8	-4	4	.	.	.
$\chi_{26}^{(99)}$	24	-24	8	-8	-16	16	.	24	-24	8	-8	24	-24	8	-8	-16	16	8	-8	4	-4	.	.	.
$\chi_{26}^{(100)}$	24	-24	8	-8	-16	16	.	24	-24	8	-8	24	-24	8	-8	-16	16	-8	8	-4	4	.	.	.
$\chi_{26}^{(101)}$	30	-30	10	-10	20	-20	.	30	-30	10	-10	-30	30	-10	10	-20	20	4	-4	2	-2	.	.	.
$\chi_{26}^{(102)}$	30	-30	10	-10	20	-20	.	30	-30	10	-10	-30	30	-10	10	-20	20	-4	4	-2	2	.	.	.
$\chi_{26}^{(103)}$	30	-30	10	-10	-20	20	.	30	-30	10	-10	-30	30	-10	10	20	-20	4	-4	2	-2	.	.	.
$\chi_{26}^{(104)}$	30	-30	10	-10	-20	20	.	30	-30	10	-10	-30	30	-10	10	20	-20	-4	4	-2	2	.	.	.
$\chi_{26}^{(105)}$	30	-30	10	-10	20	-20	.	30	-30	10	-10	30	-30	10	-10	20	-20	4	-4	2	-2	.	.	.
$\chi_{26}^{(106)}$	30	-30	10	-10	20	-20	.	30	-30	10	-10	30	-30	10	-10	20	-20	-4	4	-2	2	.	.	.
$\chi_{26}^{(107)}$	30	-30	10	-10	-20	20	.	30	-30	10	-10	30	-30	10	-10	-20	20	4	-4	2	-2	.	.	.
$\chi_{26}^{(108)}$	30	-30	10	-10	-20	20	.	30	-30	10	-10	30	-30	10	-10	-20	20	-4	4	-2	2	.	.	.
$\chi_{26}^{(109)}$	30	30	-2	-2	.	.	.	-30	-30	2	2	.	.	.	.	.	.	-10	-10	-2	-2	6	.	.
$\chi_{26}^{(110)}$	30	30	-2	-2	.	.	.	-30	-30	2	2	.	.	.	.	.	.	-14	-14	2	2	2	.	.
$\chi_{26}^{(111)}$	30	30	-2	-2	.	.	.	-30	-30	2	2	.	.	.	.	.	.	10	10	2	2	-6	.	.
$\chi_{26}^{(112)}$	30	30	-2	-2	.	.	.	-30	-30	2	2	.	.	.	.	.	.	14	14	-2	-2	-2	.	.
$\chi_{26}^{(113)}$	30	30	-2	-2	-10	-10	6	30	30	-2	-2	-30	-30	2	2	10	10	-6	-2	-2	2	2	-2	.
$\chi_{26}^{(114)}$	30	30	-2	-2	-10	-10	6	30	30	-2	-2	-30	-30	2	2	10	10	-6	2	2	-2	-2	2	.
$\chi_{26}^{(115)}$	30	30	-2	-2	10	10	-6	30	30	-2	-2	-30	-30	2	2	-10	-10	6	-2	-2	2	2	-2	.
$\chi_{26}^{(116)}$	30	30	-2	-2	10	10	-6	30	30	-2	-2	-30	-30	2	2	-10	-10	6	2	2	-2	-2	2	.
$\chi_{26}^{(117)}$	30	30	-2	-2	-10	-10	6	30	30	-2	-2	30	30	-2	-2	-10	-10	6	-2	-2	2	2	-2	.
$\chi_{26}^{(118)}$	30	30	-2	-2	-10	-10	6	30	30	-2	-2	30	30	-2	-2	-10	-10	6	2	2	-2	-2	2	.
$\chi_{26}^{(119)}$	30	30	-2	-2	10	10	-6	30	30	-2	-2	30	30	-2	-2	10	10	-6	-2	-2	2	2	-2	.
$\chi_{26}^{(120)}$	30	30	-2	-2	10	10	-6	30	30	-2	-2	30	30	-2	-2	10	10	-6	2	2	-2	-2	2	.
$\chi_{26}^{(121)}$	32	32	32	32	.	.	.	-32	-32	-32	-32	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(122)}$	36	-36	12	-12	24	-24	.	36	-36	12	-12	-36	36	-12	12	-24	24	.	.	.	.	.	.	.
$\chi_{26}^{(123)}$	36	-36	12	-12	-24	24	.	36	-36	12	-12	-36	36	-12	12	24	-24	.	.	.	.	.	.	.
$\chi_{26}^{(124)}$	36	-36	12	-12	24	-24	.	36	-36	12	-12	36	-36	12	-12	24	-24	.	.	.	.	.	.	.
$\chi_{26}^{(125)}$	36	-36	12	-12	-24	24	.	36	-36	12	-12	36	-36	12	-12	-24	24	.	.	.	.	.	.	.
$\chi_{26}^{(126)}$	40	-40	-8	8	.	.	.	40	-40	-8	8	-40	40	8	-8	.	.	-8	8	4	-4	.	.	.
$\chi_{26}^{(127)}$	40	-40	-8	8	.	.	.	40	-40	-8	8	-40	40	8	-8	.	.	-8	8	4	-4	.	.	.
$\chi_{26}^{(128)}$	40	-40	-8	8	.	.	.	40	-40	-8	8	-40	40	8	-8	.	.	8	-8	-4	4	.	.	.
$\chi_{26}^{(129)}$	40	-40	-8	8	.	.	.	40	-40	-8	8	-40	40	8	-8	.	.	8	-8	-4	4	.	.	.
$\chi_{26}^{(130)}$	40	-40	-8	8	.	.	.	40	-40	-8	8	40	-40	-8	8	.	.	-8	8	4	-4	.	.	.
$\chi_{26}^{(131)}$	40	-40	-8	8	.	.	.	40	-40	-8	8	40	-40	-8	8	.	.	-8	8	4	-4	.	.	.
$\chi_{26}^{(132)}$	40	-40	-8	8	.	.	.	40	-40	-8	8	40	-40	-8	8	.	.	8	-8	-4	4	.	.	.
$\chi_{26}^{(133)}$	40	-40	-8	8	.	.	.	40	-40	-8	8	40	-40	-8	8	.	.	8	-8	-4	4	.	.	.
$\chi_{26}^{(134)}$	40	-40	-8	8	.	.	.	-40	40	8	-8	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(135)}$	45	45	-3	-3	-15	-15	9	45	45	-3	-3	-45	-45	3	3	15	15	-9	9	9	-3	-3	1	.

	10														20																											
$\chi_{26}^{(136)}$	45	45	-3	-3	-15	-15	9	45	45	-3	-3	-45	-45	3	3	15	15	-9	-9	-9	3	3	-1																			
$\chi_{26}^{(137)}$	45	45	-3	-3	15	15	-9	45	45	-3	-3	-45	-45	3	3	-15	-15	9	9	9	-3	-3	1																			
$\chi_{26}^{(138)}$	45	45	-3	-3	15	15	-9	45	45	-3	-3	-45	-45	3	3	-15	-15	9	-9	-9	3	3	-1																			
$\chi_{26}^{(139)}$	45	45	-3	-3	-15	-15	9	45	45	-3	-3	45	45	-3	-3	-15	-15	9	9	9	-3	-3	1																			
$\chi_{26}^{(140)}$	45	45	-3	-3	-15	-15	9	45	45	-3	-3	45	45	-3	-3	-15	-15	9	-9	-9	3	3	-1																			
$\chi_{26}^{(141)}$	45	45	-3	-3	15	15	-9	45	45	-3	-3	45	45	-3	-3	15	15	-9	9	9	-3	-3	1																			
$\chi_{26}^{(142)}$	45	45	-3	-3	15	15	-9	45	45	-3	-3	45	45	-3	-3	15	15	-9	-9	-9	3	3	-1																			
$\chi_{26}^{(143)}$	45	45	-3	-3	-15	-15	9	45	45	-3	-3	-45	-45	3	3	15	15	-9	-3	-3	-3	-3	5																			
$\chi_{26}^{(144)}$	45	45	-3	-3	-15	-15	9	45	45	-3	-3	-45	-45	3	3	15	15	-9	3	3	3	3	-5																			
$\chi_{26}^{(145)}$	45	45	-3	-3	15	15	-9	45	45	-3	-3	-45	-45	3	3	-15	-15	9	-3	-3	-3	-3	5																			
$\chi_{26}^{(146)}$	45	45	-3	-3	15	15	-9	45	45	-3	-3	-45	-45	3	3	-15	-15	9	3	3	3	3	-5																			
$\chi_{26}^{(147)}$	45	45	-3	-3	-15	-15	9	45	45	-3	-3	45	45	-3	-3	-15	-15	9	-3	-3	-3	-3	5																			
$\chi_{26}^{(148)}$	45	45	-3	-3	-15	-15	9	45	45	-3	-3	45	45	-3	-3	-15	-15	9	3	3	3	3	-5																			
$\chi_{26}^{(149)}$	45	45	-3	-3	15	15	-9	45	45	-3	-3	45	45	-3	-3	15	15	-9	-3	-3	-3	-3	5																			
$\chi_{26}^{(150)}$	45	45	-3	-3	15	15	-9	45	45	-3	-3	45	45	-3	-3	15	15	-9	3	3	3	3	-5																			
$\chi_{26}^{(151)}$	48	-48	16	-16	.	.	.	-48	48	-16	16	.	.	.	.	.	.	16	-16	8	-8	.														
$\chi_{26}^{(152)}$	48	-48	16	-16	.	.	.	-48	48	-16	16	.	.	.	.	.	.	-16	16	-8	8	.														
$\chi_{26}^{(153)}$	60	-60	20	-20	.	.	.	-60	60	-20	20	.	.	.	.	.	.	8	-8	4	-4	.														
$\chi_{26}^{(154)}$	60	-60	20	-20	.	.	.	-60	60	-20	20	.	.	.	.	.	.	-8	8	-4	4	.														
$\chi_{26}^{(155)}$	60	60	-4	-4	.	.	.	-60	-60	4	4	.	.	.	.	.	.	-4	-4	4	4	-4														
$\chi_{26}^{(156)}$	60	60	-4	-4	.	.	.	-60	-60	4	4	.	.	.	.	.	.	4	4	-4	-4	4														
$\chi_{26}^{(157)}$	72	-72	24	-24	.	.	.	-72	72	-24	24																				
$\chi_{26}^{(158)}$	80	-80	-16	16	.	.	.	-80	80	16	-16	.	.	.	.	.	.	-16	16	8	-8	.														
$\chi_{26}^{(159)}$	80	-80	-16	16	.	.	.	-80	80	16	-16	.	.	.	.	.	.	16	-16	-8	8	.														
$\chi_{26}^{(160)}$	80	-80	-16	16	.	.	.	80	-80	-16	16	-80	80	16	-16																				
$\chi_{26}^{(161)}$	80	-80	-16	16	.	.	.	80	-80	-16	16	80	-80	-16	16																				
$\chi_{26}^{(162)}$	80	-80	-16	16	.	.	.	-80	80	16	-16																				
$\chi_{26}^{(163)}$	80	-80	-16	16	.	.	.	-80	80	16	-16																				
$\chi_{26}^{(164)}$	90	90	-6	-6	.	.	.	-90	-90	6	6	.	.	.	.	.	.	18	18	-6	-6	2														
$\chi_{26}^{(165)}$	90	90	-6	-6	.	.	.	-90	-90	6	6	.	.	.	.	.	.	-18	-18	6	6	-2														
$\chi_{26}^{(166)}$	90	90	-6	-6	.	.	.	-90	-90	6	6	.	.	.	.	.	.	-6	-6	-6	-6	10														
$\chi_{26}^{(167)}$	90	90	-6	-6	.	.	.	-90	-90	6	6	.	.	.	.	.	.	6	6	6	6	-10														
	30														40														50													
$\chi_{26}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																				
$\chi_{26}^{(2)}$	1	1	1	1	1	-1	-1	-1	-1	-1	1	1	1	1	1	-1	-1	-1	-1	-1	1	1																				
$\chi_{26}^{(3)}$	-1	-1	-1	-1	-1	1	1	1	1	1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1																				
$\chi_{26}^{(4)}$	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1																				
$\chi_{26}^{(5)}$	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	1	1	1																				
$\chi_{26}^{(6)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	1	1	1																				
$\chi_{26}^{(7)}$	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1																				
$\chi_{26}^{(8)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1																				
$\chi_{26}^{(9)}$	.	.	.	.	.	2	2	2	2	2	.	.	.	.	.	.	.	.	.	2	2	2						
$\chi_{26}^{(10)}$	.	.	.	.	.	-2	-2	-2	-2	-2	.	.	.	.	.	.	.	.	.	2	2	2						

	30										40										50									
$\chi_{26}^{(11)}$	3	3	3	3	3	3	3	3	3	3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	1	1	1	1	1	1	1	1	1	1
$\chi_{26}^{(12)}$	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	3	3	3	3	3	3	3	3	3	3	1	1	1	1	1	1	1	1	1	1
$\chi_{26}^{(13)}$	-3	-3	-3	-3	-3	3	3	3	3	3	-3	-3	-3	-3	-3	3	3	3	3	3	1	1	1	1	1	-1	-1	-1	-1	-1
$\chi_{26}^{(14)}$	3	3	3	3	3	-3	-3	-3	-3	-3	3	3	3	3	3	-3	-3	-3	-3	-3	1	1	1	1	1	-1	-1	-1	-1	-1
$\chi_{26}^{(15)}$	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	1	1	1	1	1	1	1	1	1	1
$\chi_{26}^{(16)}$	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	1	1	1	1	1	1	1	1	1	1
$\chi_{26}^{(17)}$	-3	-3	-3	-3	-3	3	3	3	3	3	3	3	3	3	3	-3	-3	-3	-3	-3	1	1	1	1	1	-1	-1	-1	-1	-1
$\chi_{26}^{(18)}$	3	3	3	3	3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	3	3	3	3	3	1	1	1	1	1	-1	-1	-1	-1	-1
$\chi_{26}^{(19)}$	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	1
$\chi_{26}^{(20)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{26}^{(21)}$	-1	-1	-1	-1	-1	1	1	1	1	1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1
$\chi_{26}^{(22)}$	1	1	1	1	1	-1	-1	-1	-1	-1	1	1	1	1	1	-1	-1	-1	-1	-1	1	1	1	1	1	-1	-1	-1	-1	-1
$\chi_{26}^{(23)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{26}^{(24)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	1
$\chi_{26}^{(25)}$	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	1	1	1	1	1	-1	-1	-1	-1	-1
$\chi_{26}^{(26)}$	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1
$\chi_{26}^{(27)}$	-2	2	.	4	-4	-4	4	-2	2	.	4	-4	2	-2	.	2	-2	.	-4	4	2	-2	2	-2	.	.	.	.	-2	-2
$\chi_{26}^{(28)}$	2	-2	.	-4	4	4	-4	2	-2	.	-4	4	-2	2	.	-2	2	.	4	-4	2	-2	2	-2	.	.	.	.	-2	-2
$\chi_{26}^{(29)}$	2	-2	.	-4	4	-4	4	-2	2	.	4	-4	2	-2	.	-2	2	.	4	-4	2	-2	2	-2	.	.	.	.	2	2
$\chi_{26}^{(30)}$	-2	2	.	4	-4	4	-4	2	-2	.	-4	4	-2	2	.	2	-2	.	-4	4	2	-2	2	-2	.	.	.	.	2	2
$\chi_{26}^{(31)}$	-2	2	.	4	-4	-4	4	-2	2	.	-4	4	-2	2	.	-2	2	.	4	-4	2	-2	2	-2	.	.	.	.	-2	-2
$\chi_{26}^{(32)}$	2	-2	.	-4	4	4	-4	2	-2	.	4	-4	2	-2	.	2	-2	.	-4	4	2	-2	2	-2	.	.	.	.	-2	-2
$\chi_{26}^{(33)}$	2	-2	.	-4	4	-4	4	-2	2	.	-4	4	-2	2	.	2	-2	.	-4	4	2	-2	2	-2	.	.	.	.	2	2
$\chi_{26}^{(34)}$	-2	2	.	4	-4	4	-4	2	-2	.	4	-4	2	-2	.	-2	2	.	4	-4	2	-2	2	-2	.	.	.	.	2	2
$\chi_{26}^{(35)}$	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	3	3	3	3	3	3	3	3	3	3	1	1	1	1	1	1	1	1	1	1
$\chi_{26}^{(36)}$	3	3	3	3	3	3	3	3	3	3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	1	1	1	1	1	1	1	1	1	1
$\chi_{26}^{(37)}$	3	3	3	3	3	-3	-3	-3	-3	-3	3	3	3	3	3	-3	-3	-3	-3	-3	1	1	1	1	1	-1	-1	-1	-1	-1
$\chi_{26}^{(38)}$	-3	-3	-3	-3	-3	3	3	3	3	3	-3	-3	-3	-3	-3	3	3	3	3	3	1	1	1	1	1	-1	-1	-1	-1	-1
$\chi_{26}^{(39)}$	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	1	1	1	1	1	1	1	1	1	1
$\chi_{26}^{(40)}$	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	1	1	1	1	1	1	1	1	1	1
$\chi_{26}^{(41)}$	3	3	3	3	3	-3	-3	-3	-3	-3	-3	-3	-3	-3	-3	3	3	3	3	3	1	1	1	1	1	-1	-1	-1	-1	-1
$\chi_{26}^{(42)}$	-3	-3	-3	-3	-3	3	3	3	3	3	3	3	3	3	3	-3	-3	-3	-3	-3	1	1	1	1	1	-1	-1	-1	-1	-1
$\chi_{26}^{(43)}$	.	.	.	.	.	-6	-6	-6	-6	-6	.	.	.	.	.	.	.	.	.	.	2	2	2	2	2	.	.	.	.	.
$\chi_{26}^{(44)}$	.	.	.	.	.	6	6	6	6	6	.	.	.	.	.	.	.	.	.	.	2	2	2	2	2	.	.	.	.	.
$\chi_{26}^{(45)}$	2	2	2	2	2	2	2	2	2	2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
$\chi_{26}^{(46)}$	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	2	2	2	2	2	2	2	2	2	2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
$\chi_{26}^{(47)}$	-2	-2	-2	-2	-2	2	2	2	2	2	-2	-2	-2	-2	-2	2	2	2	2	2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
$\chi_{26}^{(48)}$	2	2	2	2	2	-2	-2	-2	-2	-2	2	2	2	2	2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
$\chi_{26}^{(49)}$	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
$\chi_{26}^{(50)}$	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
$\chi_{26}^{(51)}$	-2	-2	-2	-2	-2	2	2	2	2	2	2	2	2	2	2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
$\chi_{26}^{(52)}$	2	2	2	2	2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	2	2	2	2	2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
$\chi_{26}^{(53)}$	.	.	.	.	.	-2	-2	-2	-2	-2	.	.	.	.	.	.	.	.	.	.	2	2	2	2	2	.	.	.	.	.
$\chi_{26}^{(54)}$	.	.	.	.	.	2	2	2	2	2	.	.	.	.	.	.	.	.	.	.	2	2	2	2	2	.	.	.	.	.
$\chi_{26}^{(55)}$	.	.	.	.	.	8	-8	4	-4	.	.	.	.	.	.	.	.	.	.	.	4	-4	4	-4	.	.	.	.	.	.

	30												40												50											
$\chi_{26}^{(101)}$	2	-2	.	-4	4	4	-4	2	-2	.	-4	4	-2	2	.	-2	2	.	4	-4	2	-2	2	-2	.	.	.	-2								
$\chi_{26}^{(102)}$	-2	2	.	4	-4	-4	4	-2	2	.	4	-4	2	-2	.	2	-2	.	-4	4	2	-2	2	-2	.	.	.	-2								
$\chi_{26}^{(103)}$	-2	2	.	4	-4	4	-4	2	-2	.	-4	4	-2	2	.	2	-2	.	-4	4	2	-2	2	-2	.	.	.	2								
$\chi_{26}^{(104)}$	2	-2	.	-4	4	-4	4	-2	2	.	4	-4	2	-2	.	-2	2	.	4	-4	2	-2	2	-2	.	.	.	2								
$\chi_{26}^{(105)}$	2	-2	.	-4	4	4	-4	2	-2	.	4	-4	2	-2	.	2	-2	.	-4	4	2	-2	2	-2	.	.	.	-2								
$\chi_{26}^{(106)}$	-2	2	.	4	-4	-4	4	-2	2	.	-4	4	-2	2	.	-2	2	.	4	-4	2	-2	2	-2	.	.	.	-2								
$\chi_{26}^{(107)}$	-2	2	.	4	-4	4	-4	2	-2	.	4	-4	2	-2	.	-2	2	.	4	-4	2	-2	2	-2	.	.	.	2								
$\chi_{26}^{(108)}$	2	-2	.	-4	4	-4	4	-2	2	.	-4	4	-2	2	.	2	-2	.	-4	4	2	-2	2	-2	.	.	.	2								
$\chi_{26}^{(109)}$	.	.	.	.	.	10	10	2	2	-6	.	.	.	.	.	.	.	.	.	.	-2	-2	6	6	-2	.	.	.
$\chi_{26}^{(110)}$	.	.	.	.	.	14	14	-2	-2	-2	.	.	.	.	.	.	.	.	.	.	6	6	-2	-2	-2	.	.	.
$\chi_{26}^{(111)}$	.	.	.	.	.	-10	-10	-2	-2	6	.	.	.	.	.	.	.	.	.	.	-2	-2	6	6	-2	.	.	.
$\chi_{26}^{(112)}$	.	.	.	.	.	-14	-14	2	2	2	.	.	.	.	.	.	.	.	.	.	6	6	-2	-2	-2	.	.	.
$\chi_{26}^{(113)}$	2	2	-2	-2	-2	-2	-2	2	2	-2	2	2	-2	-2	2	-2	-2	2	2	2	2	2	2	2	-2	2	2	-2								
$\chi_{26}^{(114)}$	-2	-2	2	2	2	2	2	-2	-2	2	-2	-2	2	2	-2	2	2	-2	-2	-2	2	2	2	2	-2	2	2	-2								
$\chi_{26}^{(115)}$	-2	-2	2	2	2	-2	-2	2	2	-2	2	2	-2	-2	2	2	2	-2	-2	-2	2	2	2	2	-2	-2	-2	2								
$\chi_{26}^{(116)}$	2	2	-2	-2	-2	2	2	-2	-2	2	-2	-2	2	2	-2	-2	-2	2	2	2	2	2	2	2	-2	-2	-2	2								
$\chi_{26}^{(117)}$	2	2	-2	-2	-2	-2	-2	2	2	-2	-2	-2	2	2	-2	2	2	-2	-2	-2	2	2	2	2	-2	2	2	-2								
$\chi_{26}^{(118)}$	-2	-2	2	2	2	2	2	-2	-2	2	2	2	-2	-2	2	-2	-2	2	2	2	2	2	2	2	-2	2	2	-2								
$\chi_{26}^{(119)}$	-2	-2	2	2	2	-2	-2	2	2	-2	-2	-2	2	2	-2	-2	-2	2	2	2	2	2	2	2	-2	-2	-2	2								
$\chi_{26}^{(120)}$	2	2	-2	-2	-2	2	2	-2	-2	2	2	2	-2	-2	2	2	2	-2	-2	-2	2	2	2	2	-2	-2	-2	2								
$\chi_{26}^{(121)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(122)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-4	4	-4	4	.	.	.	4
$\chi_{26}^{(123)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-4	4	-4	4	.	.	.	-4
$\chi_{26}^{(124)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-4	4	-4	4	.	.	.	4
$\chi_{26}^{(125)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-4	4	-4	4	.	.	.	-4
$\chi_{26}^{(126)}$	4	-4	.	8	-8	-8	8	4	-4	.	8	-8	-4	4	.	-4	4	.	-8	8								
$\chi_{26}^{(127)}$	-4	4	.	-8	8	-8	8	4	-4	.	8	-8	-4	4	.	4	-4	.	8	-8								
$\chi_{26}^{(128)}$	4	-4	.	8	-8	8	-8	-4	4	.	-8	8	4	-4	.	-4	4	.	-8	8								
$\chi_{26}^{(129)}$	-4	4	.	-8	8	8	-8	-4	4	.	-8	8	4	-4	.	4	-4	.	8	-8								
$\chi_{26}^{(130)}$	4	-4	.	8	-8	-8	8	4	-4	.	-8	8	4	-4	.	4	-4	.	8	-8								
$\chi_{26}^{(131)}$	-4	4	.	-8	8	-8	8	4	-4	.	-8	8	4	-4	.	-4	4	.	-8	8								
$\chi_{26}^{(132)}$	4	-4	.	8	-8	8	-8	-4	4	.	8	-8	-4	4	.	4	-4	.	8	-8								
$\chi_{26}^{(133)}$	-4	4	.	-8	8	8	-8	-4	4	.	8	-8	-4	4	.	-4	4	.	-8	8								
$\chi_{26}^{(134)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-8	8	8	-8				
$\chi_{26}^{(135)}$	-3	-3	5	-3	-3	9	9	-3	-3	1	-9	-9	3	3	-1	3	3	-5	3	3	1	1	-3	-3	1	-3	1	1								
$\chi_{26}^{(136)}$	3	3	-5	3	3	-9	-9	3	3	-1	9	9	-3	-3	1	-3	-3	5	-3	-3	1	1	-3	-3	1	-3	1	1								
$\chi_{26}^{(137)}$	3	3	-5	3	3	9	9	-3	-3	1	-9	-9	3	3	-1	-3	-3	5	-3	-3	1	1	-3	-3	1	3	-1	-1								
$\chi_{26}^{(138)}$	-3	-3	5	-3	-3	-9	-9	3	3	-1	9	9	-3	-3	1	3	3	-5	3	3	1	1	-3	-3	1	3	-1	-1								
$\chi_{26}^{(139)}$	-3	-3	5	-3	-3	9	9	-3	-3	1	9	9	-3	-3	1	-3	-3	5	-3	-3	1	1	-3	-3	1	-3	1	1								
$\chi_{26}^{(140)}$	3	3	-5	3	3	-9	-9	3	3	-1	-9	-9	3	3	-1	3	3	-5	3	3	1	1	-3	-3	1	-3	1	1								
$\chi_{26}^{(141)}$	3	3	-5	3	3	9	9	-3	-3	1	9	9	-3	-3	1	3	3	-5	3	3	1	1	-3	-3	1	3	-1	-1								
$\chi_{26}^{(142)}$	-3	-3	5	-3	-3	-9	-9	3	3	-1	-9	-9	3	3	-1	-3	-3	5	-3	-3	1	1	-3	-3	1	3	-1	-1								
$\chi_{26}^{(143)}$	-3	-3	1	9	9	-3	-3	-3	-3	5	3	3	3	3	-5	3	3	-1	-9	-9	-3	-3	1	1	1	1	-3	1								
$\chi_{26}^{(144)}$	3	3	-1	-9	-9	3	3	3	3	-5	-3	-3	-3	-3	5	-3	-3	1	9	9	-3	-3	1	1	1	1	-3	1								
$\chi_{26}^{(145)}$	3	3	-1	-9	-9	-3	-3	-3	-3	5	3	3	3	3	-5	-3	-3	1	9	9	-3	-3	1	1	1	-1	3	-1								

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$\chi_{26}^{(146)}$	-3	-3	1	9	9	3	3	3	3	-5	-3	-3	-3	-3	5	3	3	-1	-9	-9	-3	-3	1	1	1	-1	3	-1		
$\chi_{26}^{(147)}$	-3	-3	1	9	9	-3	-3	-3	-3	5	-3	-3	-3	-3	5	-3	-3	1	9	9	-3	-3	1	1	1	1	-3	1		
$\chi_{26}^{(148)}$	3	3	-1	-9	-9	3	3	3	3	-5	3	3	3	3	-5	3	3	-1	-9	-9	-3	-3	1	1	1	1	-3	1		
$\chi_{26}^{(149)}$	3	3	-1	-9	-9	-3	-3	-3	-3	5	-3	-3	-3	-3	5	3	3	-1	-9	-9	-3	-3	1	1	1	-1	3	-1		
$\chi_{26}^{(150)}$	-3	-3	1	9	9	3	3	3	3	-5	3	3	3	3	-5	-3	-3	1	9	9	-3	-3	1	1	1	-1	3	-1		
$\chi_{26}^{(151)}$	.	.	.	.	.	-16	16	-8	8	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(152)}$	.	.	.	.	.	16	-16	8	-8	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(153)}$	.	.	.	.	.	-8	8	-4	4	.	.	.	.	.	.	.	.	.	.	.	4	-4	4	-4	.	.	.	.
$\chi_{26}^{(154)}$	.	.	.	.	.	8	-8	4	-4	.	.	.	.	.	.	.	.	.	.	.	4	-4	4	-4	.	.	.	.
$\chi_{26}^{(155)}$	.	.	.	.	.	4	4	-4	-4	4	.	.	.	.	.	.	.	.	.	.	4	4	4	4	-4	.	.	.
$\chi_{26}^{(156)}$	.	.	.	.	.	-4	-4	4	4	-4	.	.	.	.	.	.	.	.	.	.	4	4	4	4	-4	.	.	.
$\chi_{26}^{(157)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-8	8	-8	8	.	.	.	.
$\chi_{26}^{(158)}$	.	.	.	.	.	16	-16	-8	8	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(159)}$	.	.	.	.	.	-16	16	8	-8	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(160)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(161)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(162)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(163)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(164)}$	.	.	.	.	.	-18	-18	6	6	-2	.	.	.	.	.	.	.	.	.	.	2	2	-6	-6	2	.	.	.
$\chi_{26}^{(165)}$	.	.	.	.	.	18	18	-6	-6	2	.	.	.	.	.	.	.	.	.	.	2	2	-6	-6	2	.	.	.
$\chi_{26}^{(166)}$	.	.	.	.	.	6	6	6	6	-10	.	.	.	.	.	.	.	.	.	.	-6	-6	2	2	2	.	.	.
$\chi_{26}^{(167)}$	.	.	.	.	.	-6	-6	-6	-6	10	.	.	.	.	.	.	.	.	.	.	-6	-6	2	2	2	.	.	.
	60										70																			
$\chi_{26}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
$\chi_{26}^{(2)}$	-1	1	1	1	1	1	-1	-1	-1	-1	-1	1	1	1	1	-1	-1	1	1	1	1	1	1	1	-1					
$\chi_{26}^{(3)}$	-1	1	1	1	1	1	-1	-1	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	1					
$\chi_{26}^{(4)}$	-1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	1	1	-1	-1	-1	-1	1	1	-1						
$\chi_{26}^{(5)}$	-1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1	1	-1	-1	1						
$\chi_{26}^{(6)}$	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	-1					
$\chi_{26}^{(7)}$	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1				
$\chi_{26}^{(8)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1				
$\chi_{26}^{(9)}$	.	-2	-2	-2	-2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-2			
$\chi_{26}^{(10)}$	.	-2	-2	-2	-2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2			
$\chi_{26}^{(11)}$	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	-1					
$\chi_{26}^{(12)}$	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1				
$\chi_{26}^{(13)}$	-1	1	1	1	1	1	-1	-1	-1	-1	-1	1	1	1	1	-1	-1	1	1	1	1	1	1	1	1	-1				
$\chi_{26}^{(14)}$	-1	1	1	1	1	1	-1	-1	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	1				
$\chi_{26}^{(15)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1				
$\chi_{26}^{(16)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1				
$\chi_{26}^{(17)}$	-1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	1	1	-1	-1	-1	-1	-1	-1	1	1	-1				
$\chi_{26}^{(18)}$	-1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	1					
$\chi_{26}^{(19)}$	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	3	3	3	3	3	3	-3	-3	-3						
$\chi_{26}^{(20)}$	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-3	-3	-3	-3	-3	-3	3	3	3						

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$\chi_{26}^{(21)}$	-1	1	1	1	1	1	-1	-1	-1	-1	-1	1	1	1	1	-3	-3	3	3	3	3	3	3	-3
$\chi_{26}^{(22)}$	-1	1	1	1	1	1	-1	-1	-1	-1	-1	1	1	1	1	3	3	-3	-3	-3	-3	-3	-3	3
$\chi_{26}^{(23)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-3	-3	-3	-3	-3	-3	-3	-3	-3
$\chi_{26}^{(24)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	3	3	3	3	3	3	3	3
$\chi_{26}^{(25)}$	-1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	3	3	-3	-3	-3	-3	3	3	-3
$\chi_{26}^{(26)}$	-1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-3	-3	3	3	3	3	-3	-3	3
$\chi_{26}^{(27)}$	2	2	-2	2	-2	.	-2	2	-2	2	.	.	.	2	-2	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(28)}$	2	2	-2	2	-2	.	-2	2	-2	2	.	.	.	2	-2	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(29)}$	-2	2	-2	2	-2	.	-2	2	-2	2	.	.	.	-2	2	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(30)}$	-2	2	-2	2	-2	.	-2	2	-2	2	.	.	.	-2	2	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(31)}$	2	2	-2	2	-2	.	2	-2	2	-2	.	.	.	-2	2	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(32)}$	2	2	-2	2	-2	.	2	-2	2	-2	.	.	.	-2	2	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(33)}$	-2	2	-2	2	-2	.	2	-2	2	-2	.	.	.	2	-2	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(34)}$	-2	2	-2	2	-2	.	2	-2	2	-2	.	.	.	2	-2	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(35)}$	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	3	3	3	3	3	3	-3	-3	-3
$\chi_{26}^{(36)}$	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-3	-3	-3	-3	-3	-3	3	3	3
$\chi_{26}^{(37)}$	-1	1	1	1	1	1	-1	-1	-1	-1	-1	1	1	1	1	-3	-3	3	3	3	3	3	3	-3
$\chi_{26}^{(38)}$	-1	1	1	1	1	1	-1	-1	-1	-1	-1	1	1	1	1	3	3	-3	-3	-3	-3	-3	-3	3
$\chi_{26}^{(39)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-3	-3	-3	-3	-3	-3	-3	-3	-3
$\chi_{26}^{(40)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	3	3	3	3	3	3	3	3
$\chi_{26}^{(41)}$	-1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	3	3	-3	-3	-3	-3	3	3	-3
$\chi_{26}^{(42)}$	-1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-3	-3	3	3	3	3	-3	-3	3
$\chi_{26}^{(43)}$	.	-2	-2	-2	-2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-2
$\chi_{26}^{(44)}$	.	-2	-2	-2	-2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2
$\chi_{26}^{(45)}$	-2	-2	-2	-2	-2	-2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	-2	-2	-2
$\chi_{26}^{(46)}$	-2	-2	-2	-2	-2	-2	2	2	2	2	2	2	2	2	2	-2	-2	-2	-2	-2	-2	2	2	2
$\chi_{26}^{(47)}$	2	-2	-2	-2	-2	-2	2	2	2	2	2	-2	-2	-2	-2	-2	-2	2	2	2	2	2	2	-2
$\chi_{26}^{(48)}$	2	-2	-2	-2	-2	-2	2	2	2	2	2	-2	-2	-2	-2	2	2	-2	-2	-2	-2	-2	-2	2
$\chi_{26}^{(49)}$	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
$\chi_{26}^{(50)}$	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	2	2	2	2	2	2	2	2	2
$\chi_{26}^{(51)}$	2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	2	2	2	2	2	2	-2	-2	-2	-2	2	2	-2
$\chi_{26}^{(52)}$	2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	2	2	2	2	-2	-2	2	2	2	2	-2	-2	2
$\chi_{26}^{(53)}$	.	-2	-2	-2	-2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-6
$\chi_{26}^{(54)}$	.	-2	-2	-2	-2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	6
$\chi_{26}^{(55)}$	.	-4	4	-4	4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(56)}$	.	-4	4	-4	4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(57)}$	-1	-1	-1	3	3	-1	1	1	-3	-3	1	-3	1	1	1	1	-3	-3	-3	1	-1	3	3	3
$\chi_{26}^{(58)}$	-1	3	3	-1	-1	-1	-3	-3	1	1	1	1	-3	1	1	-1	3	3	3	-1	1	-3	-3	-3
$\chi_{26}^{(59)}$	-1	-1	-1	3	3	-1	1	1	-3	-3	1	-3	1	1	1	-1	3	3	3	-1	1	-3	-3	-3
$\chi_{26}^{(60)}$	-1	3	3	-1	-1	-1	-3	-3	1	1	1	1	-3	1	1	1	-3	-3	-3	1	-1	3	3	3
$\chi_{26}^{(61)}$	1	-1	-1	3	3	-1	1	1	-3	-3	1	3	-1	-1	-1	-1	3	-3	-3	1	1	-3	3	3
$\chi_{26}^{(62)}$	1	3	3	-1	-1	-1	-3	-3	1	1	1	-1	3	-1	-1	1	-3	3	3	-1	-1	3	-3	-3
$\chi_{26}^{(63)}$	1	-1	-1	3	3	-1	1	1	-3	-3	1	3	-1	-1	-1	1	-3	3	3	-1	-1	3	-3	-3
$\chi_{26}^{(64)}$	1	3	3	-1	-1	-1	-3	-3	1	1	1	-1	3	-1	-1	-1	3	-3	-3	1	1	-3	3	3
$\chi_{26}^{(65)}$	-1	-1	-1	3	3	-1	-1	-1	3	3	-1	3	-1	-1	-1	-1	3	3	3	-1	-1	3	3	3

	60												70											
$\chi_{26}^{(111)}$	.	2	2	-6	-6	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-6	
$\chi_{26}^{(112)}$	.	-6	-6	2	2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	6	
$\chi_{26}^{(113)}$	-2	2	2	2	2	-2	-2	-2	-2	-2	2	-2	-2	2	2	-2	6	6	6	-2	2	-6	-6	
$\chi_{26}^{(114)}$	-2	2	2	2	2	-2	-2	-2	-2	-2	2	-2	-2	2	2	2	-6	-6	-6	2	-2	6	6	
$\chi_{26}^{(115)}$	2	2	2	2	2	-2	-2	-2	-2	-2	2	2	2	-2	-2	2	-6	6	6	-2	-2	6	-6	
$\chi_{26}^{(116)}$	2	2	2	2	2	-2	-2	-2	-2	-2	2	2	2	-2	-2	-2	6	-6	-6	2	2	-6	6	
$\chi_{26}^{(117)}$	-2	2	2	2	2	-2	2	2	2	2	-2	2	2	-2	-2	2	-6	-6	-6	2	2	-6	-6	
$\chi_{26}^{(118)}$	-2	2	2	2	2	-2	2	2	2	2	-2	2	2	-2	-2	-2	6	6	6	-2	-2	6	6	
$\chi_{26}^{(119)}$	2	2	2	2	2	-2	2	2	2	2	-2	-2	-2	2	2	-2	6	-6	-6	2	-2	6	-6	
$\chi_{26}^{(120)}$	2	2	2	2	2	-2	2	2	2	2	-2	-2	-2	2	2	2	-6	6	6	-2	2	-6	6	
$\chi_{26}^{(121)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(122)}$	-4	-4	4	-4	4	.	4	-4	4	-4	.	.	.	-4	4	.	.	.	.	.	.	.
$\chi_{26}^{(123)}$	4	-4	4	-4	4	.	4	-4	4	-4	.	.	.	4	-4	.	.	.	.	.	.	.
$\chi_{26}^{(124)}$	-4	-4	4	-4	4	.	-4	4	-4	4	.	.	.	4	-4	.	.	.	.	.	.	.
$\chi_{26}^{(125)}$	4	-4	4	-4	4	.	-4	4	-4	4	.	.	.	-4	4	.	.	.	.	.	.	.
$\chi_{26}^{(126)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(127)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(128)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(129)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(130)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(131)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(132)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(133)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(134)}$	.	8	-8	-8	8	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(135)}$	1	1	1	-3	-3	1	-1	-1	3	3	-1	3	-1	-1	-1	3	3	3	-1	1	-3	-3		
$\chi_{26}^{(136)}$	1	1	1	-3	-3	1	-1	-1	3	3	-1	3	-1	-1	-1	1	-3	-3	-3	1	-1	3	3	
$\chi_{26}^{(137)}$	-1	1	1	-3	-3	1	-1	-1	3	3	-1	-3	1	1	1	1	-3	3	3	-1	-1	3	-3	
$\chi_{26}^{(138)}$	-1	1	1	-3	-3	1	-1	-1	3	3	-1	-3	1	1	1	-1	3	-3	-3	1	1	-3	3	
$\chi_{26}^{(139)}$	1	1	1	-3	-3	1	1	1	-3	-3	1	-3	1	1	1	1	-3	-3	-3	1	1	-3	-3	
$\chi_{26}^{(140)}$	1	1	1	-3	-3	1	1	1	-3	-3	1	-3	1	1	1	-1	3	3	3	-1	-1	3	3	
$\chi_{26}^{(141)}$	-1	1	1	-3	-3	1	1	1	-3	-3	1	3	-1	-1	-1	-1	3	-3	-3	1	-1	3	-3	
$\chi_{26}^{(142)}$	-1	1	1	-3	-3	1	1	1	-3	-3	1	3	-1	-1	-1	1	-3	3	3	-1	1	-3	3	
$\chi_{26}^{(143)}$	1	-3	-3	1	1	1	3	3	-1	-1	-1	-1	3	-1	-1	-1	3	3	3	-1	1	-3	-3	
$\chi_{26}^{(144)}$	1	-3	-3	1	1	1	3	3	-1	-1	-1	-1	3	-1	-1	1	-3	-3	-3	1	-1	3	3	
$\chi_{26}^{(145)}$	-1	-3	-3	1	1	1	3	3	-1	-1	-1	1	-3	1	1	1	-3	3	3	-1	-1	3	-3	
$\chi_{26}^{(146)}$	-1	-3	-3	1	1	1	3	3	-1	-1	-1	1	-3	1	1	-1	3	-3	-3	1	1	-3	3	
$\chi_{26}^{(147)}$	1	-3	-3	1	1	1	-3	-3	1	1	1	1	-3	1	1	1	-3	-3	-3	1	1	-3	-3	
$\chi_{26}^{(148)}$	1	-3	-3	1	1	1	-3	-3	1	1	1	1	-3	1	1	-1	3	3	3	-1	-1	3	3	
$\chi_{26}^{(149)}$	-1	-3	-3	1	1	1	-3	-3	1	1	1	-1	3	-1	-1	-1	3	-3	-3	1	-1	3	-3	
$\chi_{26}^{(150)}$	-1	-3	-3	1	1	1	-3	-3	1	1	1	-1	3	-1	-1	1	-3	3	3	-1	1	-3	3	
$\chi_{26}^{(151)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(152)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(153)}$	.	-4	4	-4	4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(154)}$	.	-4	4	-4	4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(155)}$	.	-4	-4	-4	-4	4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-12	

	60										70									
$\chi_{26}^{(156)}$	.	-4	-4	-4	-4	4	.	.	.	.	.	.	.	.	.	.	.	.	.	12
$\chi_{26}^{(157)}$	.	8	-8	8	-8	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(158)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(159)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(160)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(161)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(162)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-16	16	.	.	.
$\chi_{26}^{(163)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	16	-16	.	.	.
$\chi_{26}^{(164)}$	.	-2	-2	6	6	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	-6
$\chi_{26}^{(165)}$	.	-2	-2	6	6	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	6
$\chi_{26}^{(166)}$	.	6	6	-2	-2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	-6
$\chi_{26}^{(167)}$	.	6	6	-2	-2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	6
	80										90									
$\chi_{26}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{26}^{(2)}$	-1	-1	-1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	-1	-1	1
$\chi_{26}^{(3)}$	1	1	1	-1	-1	-1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	1
$\chi_{26}^{(4)}$	-1	-1	-1	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1	-1	-1	-1	-1	1
$\chi_{26}^{(5)}$	1	1	1	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	1	1	1	-1	1
$\chi_{26}^{(6)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	-1
$\chi_{26}^{(7)}$	1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	1	1	-1
$\chi_{26}^{(8)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1
$\chi_{26}^{(9)}$	-2	2	2	.	.	.	2	2	2	-2	-2	-2	.	.	.	.	.	.	-2	-2
$\chi_{26}^{(10)}$	2	-2	-2	.	.	.	-2	-2	-2	2	2	2	.	.	.	.	.	.	-2	-2
$\chi_{26}^{(11)}$	-1	-1	-1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	1
$\chi_{26}^{(12)}$	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	-1	-1	1
$\chi_{26}^{(13)}$	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1
$\chi_{26}^{(14)}$	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	-1	-1
$\chi_{26}^{(15)}$	-1	-1	-1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1
$\chi_{26}^{(16)}$	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_{26}^{(17)}$	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	1	1	1	-1	1
$\chi_{26}^{(18)}$	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1	-1	-1	-1	-1	1
$\chi_{26}^{(19)}$	-3	-3	-3	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	-1	-1	1
$\chi_{26}^{(20)}$	3	3	3	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	1
$\chi_{26}^{(21)}$	-3	-3	-3	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	-1	-1
$\chi_{26}^{(22)}$	3	3	3	-1	-1	-1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1
$\chi_{26}^{(23)}$	-3	-3	-3	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_{26}^{(24)}$	3	3	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1
$\chi_{26}^{(25)}$	-3	-3	-3	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1	-1	-1	-1	-1	1
$\chi_{26}^{(26)}$	3	3	3	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	1	1	1	-1	1
$\chi_{26}^{(27)}$.	.	.	-2	2	.	-2	2	.	-2	2	.	2	-2	.	2	-2	.	.	.
$\chi_{26}^{(28)}$.	.	.	2	-2	.	2	-2	.	2	-2	.	-2	2	.	-2	2	.	.	.
$\chi_{26}^{(29)}$.	.	.	2	-2	.	-2	2	.	-2	2	.	-2	2	.	2	-2	.	.	.
$\chi_{26}^{(30)}$.	.	.	-2	2	.	2	-2	.	2	-2	.	2	-2	.	-2	2	.	.	.

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$\chi_{26}^{(31)}$.	.	.	-2	2	.	-2	2	.	-2	2	.	-2	2	.	-2	2
$\chi_{26}^{(32)}$.	.	.	2	-2	.	2	-2	.	2	-2	.	2	-2	.	2	-2
$\chi_{26}^{(33)}$.	.	.	2	-2	.	-2	2	.	-2	2	.	2	-2	.	-2	2
$\chi_{26}^{(34)}$.	.	.	-2	2	.	2	-2	.	2	-2	.	-2	2	.	2	-2
$\chi_{26}^{(35)}$	-3	-3	-3	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	-1
$\chi_{26}^{(36)}$	3	3	3	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	1	1	-1
$\chi_{26}^{(37)}$	-3	-3	-3	-1	-1	-1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	1	1	1	1
$\chi_{26}^{(38)}$	3	3	3	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	-1	-1	1	1	1	1
$\chi_{26}^{(39)}$	-3	-3	-3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{26}^{(40)}$	3	3	3	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1
$\chi_{26}^{(41)}$	-3	-3	-3	-1	-1	-1	1	1	1	1	1	1	-1	-1	-1	1	1	1	-1	-1	1	1	1	-1
$\chi_{26}^{(42)}$	3	3	3	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1	-1	-1	-1	-1	-1	1	1	1	-1
$\chi_{26}^{(43)}$	-2	2	2	.	.	.	-2	-2	-2	2	2	2	.	.	.	.	.	.	.	.	2	2	-2	-2
$\chi_{26}^{(44)}$	2	-2	-2	.	.	.	2	2	2	-2	-2	-2	.	.	.	.	.	.	.	.	2	2	-2	-2
$\chi_{26}^{(45)}$	-2	-2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(46)}$	2	2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(47)}$	-2	-2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(48)}$	2	2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(49)}$	-2	-2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(50)}$	2	2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(51)}$	-2	-2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(52)}$	2	2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(53)}$	-6	6	6	.	.	.	2	2	2	-2	-2	-2	.	.	.	.	.	.	.	.	2	2	-2	-2
$\chi_{26}^{(54)}$	6	-6	-6	.	.	.	-2	-2	-2	2	2	2	.	.	.	.	.	.	.	.	2	2	-2	-2
$\chi_{26}^{(55)}$	.	.	.	.	.	.	4	-4	.	-4	4	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(56)}$	.	.	.	.	.	.	-4	4	.	4	-4	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(57)}$	-1	3	-1	1	1	-1	-1	-1	1	-1	-1	1	-1	-1	1	1	1	-1	1	-1	-1	1	-1	1
$\chi_{26}^{(58)}$	1	-3	1	1	1	-1	-1	-1	1	-1	-1	1	-1	-1	1	1	1	-1	-1	1	1	-1	1	1
$\chi_{26}^{(59)}$	1	-3	1	-1	-1	1	1	1	-1	1	1	-1	1	1	-1	-1	-1	1	1	-1	-1	1	-1	-1
$\chi_{26}^{(60)}$	-1	3	-1	-1	-1	1	1	1	-1	1	1	-1	1	1	-1	-1	-1	1	-1	1	1	-1	1	1
$\chi_{26}^{(61)}$	-1	3	-1	-1	-1	1	-1	-1	1	-1	-1	1	1	1	-1	1	1	-1	-1	1	-1	1	-1	1
$\chi_{26}^{(62)}$	1	-3	1	-1	-1	1	-1	-1	1	-1	-1	1	1	1	-1	1	1	-1	1	-1	1	-1	1	-1
$\chi_{26}^{(63)}$	1	-3	1	1	1	-1	1	1	-1	1	1	-1	-1	-1	1	-1	-1	1	-1	1	-1	1	-1	1
$\chi_{26}^{(64)}$	-1	3	-1	1	1	-1	1	1	-1	1	1	-1	-1	-1	1	-1	-1	1	1	-1	1	-1	1	-1
$\chi_{26}^{(65)}$	-1	3	-1	1	1	-1	-1	-1	1	-1	-1	1	1	1	-1	-1	-1	1	1	-1	-1	1	-1	1
$\chi_{26}^{(66)}$	1	-3	1	1	1	-1	-1	-1	1	-1	-1	1	1	1	-1	-1	-1	1	-1	1	1	-1	1	-1
$\chi_{26}^{(67)}$	1	-3	1	-1	-1	1	1	1	-1	1	1	-1	-1	-1	1	1	1	-1	1	-1	-1	1	-1	1
$\chi_{26}^{(68)}$	-1	3	-1	-1	-1	1	1	1	-1	1	1	-1	-1	-1	1	1	1	-1	-1	1	1	-1	1	-1
$\chi_{26}^{(69)}$	-1	3	-1	-1	-1	1	-1	-1	1	-1	-1	1	-1	-1	1	-1	-1	1	-1	1	-1	1	-1	-1
$\chi_{26}^{(70)}$	1	-3	1	-1	-1	1	-1	-1	1	-1	-1	1	-1	-1	1	-1	-1	1	1	-1	1	-1	1	1
$\chi_{26}^{(71)}$	1	-3	1	1	1	-1	1	1	-1	1	1	-1	1	1	-1	1	1	-1	-1	1	-1	1	-1	-1
$\chi_{26}^{(72)}$	-1	3	-1	1	1	-1	1	1	-1	1	1	-1	1	1	-1	1	1	-1	1	-1	1	-1	1	1
$\chi_{26}^{(73)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(74)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(75)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

	80										90												
$\chi_{26}^{(76)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(77)}$	-6	6	6	.	.	.	-2	-2	-2	2	2	2	.	.	.	.	.	.	-2	-2	2	2	.
$\chi_{26}^{(78)}$	6	-6	-6	.	.	.	2	2	2	-2	-2	-2	.	.	.	.	.	.	-2	-2	2	2	.
$\chi_{26}^{(79)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(80)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(81)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(82)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(83)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(84)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(85)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(86)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(87)}$	-4	4	4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(88)}$	4	-4	-4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(89)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(90)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(91)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(92)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(93)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(94)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(95)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(96)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(97)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(98)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(99)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(100)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(101)}$	.	.	.	-2	2	.	-2	2	.	-2	2	.	2	-2	.	2	-2	.	.	.	.	.	.
$\chi_{26}^{(102)}$	.	.	.	2	-2	.	2	-2	.	2	-2	.	-2	2	.	-2	2	.	.	.	.	.	.
$\chi_{26}^{(103)}$	.	.	.	2	-2	.	-2	2	.	-2	2	.	-2	2	.	2	-2	.	.	.	.	.	.
$\chi_{26}^{(104)}$	.	.	.	-2	2	.	2	-2	.	2	-2	.	2	-2	.	-2	2	.	.	.	.	.	.
$\chi_{26}^{(105)}$	.	.	.	-2	2	.	-2	2	.	-2	2	.	-2	2	.	-2	2	.	.	.	.	.	.
$\chi_{26}^{(106)}$	.	.	.	2	-2	.	2	-2	.	2	-2	.	2	-2	.	2	-2	.	.	.	.	.	.
$\chi_{26}^{(107)}$	.	.	.	2	-2	.	-2	2	.	-2	2	.	2	-2	.	-2	2	.	.	.	.	.	.
$\chi_{26}^{(108)}$	.	.	.	-2	2	.	2	-2	.	2	-2	.	-2	2	.	2	-2	.	.	.	.	.	.
$\chi_{26}^{(109)}$	-2	-6	2	.	.	.	2	2	-2	-2	-2	2	.	.	.	.	.	.	2	-2	-2	2	.
$\chi_{26}^{(110)}$	2	6	-2	.	.	.	2	2	-2	-2	-2	2	.	.	.	.	.	.	-2	2	2	-2	.
$\chi_{26}^{(111)}$	2	6	-2	.	.	.	-2	-2	2	2	2	-2	.	.	.	.	.	.	2	-2	-2	2	.
$\chi_{26}^{(112)}$	-2	-6	2	.	.	.	-2	-2	2	2	2	-2	.	.	.	.	.	.	-2	2	2	-2	.
$\chi_{26}^{(113)}$	2	-6	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(114)}$	-2	6	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(115)}$	2	-6	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(116)}$	-2	6	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(117)}$	2	-6	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(118)}$	-2	6	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(119)}$	2	-6	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(120)}$	-2	6	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

	80										90									
$\chi_{26}^{(121)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(122)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(123)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(124)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(125)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(126)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(127)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(128)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(129)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(130)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(131)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(132)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(133)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(134)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(135)}$	1	-3	1	1	1	-1	-1	-1	1	-1	-1	1	-1	-1	1	1	-1	1	-1	-1
$\chi_{26}^{(136)}$	-1	3	-1	-1	-1	1	1	1	-1	1	1	-1	1	1	-1	-1	1	1	-1	-1
$\chi_{26}^{(137)}$	1	-3	1	-1	-1	1	-1	-1	1	-1	-1	1	1	1	-1	1	-1	-1	1	-1
$\chi_{26}^{(138)}$	-1	3	-1	1	1	-1	1	1	-1	1	1	-1	-1	-1	1	-1	1	-1	1	-1
$\chi_{26}^{(139)}$	1	-3	1	1	1	-1	-1	-1	1	-1	-1	1	1	1	-1	-1	1	1	-1	-1
$\chi_{26}^{(140)}$	-1	3	-1	-1	-1	1	1	1	-1	1	1	-1	-1	-1	1	1	-1	1	-1	-1
$\chi_{26}^{(141)}$	1	-3	1	-1	-1	1	-1	-1	1	-1	-1	1	-1	-1	1	-1	1	-1	1	-1
$\chi_{26}^{(142)}$	-1	3	-1	1	1	-1	1	1	-1	1	1	-1	1	1	-1	1	-1	1	-1	-1
$\chi_{26}^{(143)}$	1	-3	1	-1	-1	1	1	1	-1	1	1	-1	1	1	-1	-1	1	-1	1	-1
$\chi_{26}^{(144)}$	-1	3	-1	1	1	-1	-1	-1	1	-1	-1	1	-1	-1	1	1	-1	1	-1	1
$\chi_{26}^{(145)}$	1	-3	1	1	1	-1	1	1	-1	1	1	-1	-1	-1	1	-1	1	1	-1	-1
$\chi_{26}^{(146)}$	-1	3	-1	-1	-1	1	-1	-1	1	-1	-1	1	1	1	-1	1	-1	1	-1	-1
$\chi_{26}^{(147)}$	1	-3	1	-1	-1	1	1	1	-1	1	1	-1	-1	-1	1	1	-1	1	-1	-1
$\chi_{26}^{(148)}$	-1	3	-1	1	1	-1	-1	-1	1	-1	-1	1	1	1	-1	-1	1	-1	1	-1
$\chi_{26}^{(149)}$	1	-3	1	1	1	-1	1	1	-1	1	1	-1	1	1	-1	1	-1	1	-1	1
$\chi_{26}^{(150)}$	-1	3	-1	-1	-1	1	-1	-1	1	-1	-1	1	-1	-1	1	-1	1	-1	1	-1
$\chi_{26}^{(151)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(152)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(153)}$	.	.	.	.	.	4	-4	.	-4	4	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(154)}$	.	.	.	.	.	-4	4	.	4	-4	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(155)}$	4	12	-4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(156)}$	-4	-12	4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(157)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(158)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(159)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(160)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(161)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(162)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(163)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(164)}$	2	6	-2	.	.	.	2	2	-2	-2	-2	2	.	.	.	.	.	2	-2	-2
$\chi_{26}^{(165)}$	-2	-6	2	.	.	.	-2	-2	2	2	2	-2	.	.	.	.	.	2	-2	-2
$\chi_{26}^{(166)}$	2	6	-2	.	.	.	-2	-2	2	2	2	-2	.	.	.	.	.	-2	2	2
$\chi_{26}^{(167)}$	-2	-6	2	.	.	.	2	2	-2	-2	-2	2	.	.	.	.	.	-2	2	2

	100				110								120													
$\chi_{26}^{(46)}$	.	.	.	.	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1
$\chi_{26}^{(47)}$	.	.	.	.	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	1	1	1
$\chi_{26}^{(48)}$	.	.	.	.	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1
$\chi_{26}^{(49)}$	.	.	.	.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1
$\chi_{26}^{(50)}$	.	.	.	.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{26}^{(51)}$	.	.	.	.	-1	-1	-1	-1	1	1	1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	1	1	1
$\chi_{26}^{(52)}$	.	.	.	.	-1	-1	-1	-1	1	1	1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1
$\chi_{26}^{(53)}$	.	.	.	.	.	.	.	.	2	2	2	2	-2	-2	-2	-2	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(54)}$	.	.	.	.	.	.	.	.	2	2	2	2	-2	-2	-2	-2	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(55)}$	.	.	.	.	.	.	.	.	-6	6	-2	2	6	-6	2	-2	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(56)}$	.	.	.	.	.	.	.	.	-6	6	-2	2	6	-6	2	-2	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(57)}$	1	1	1	-1	-3	-3	1	1	3	3	-1	-1	3	3	-1	-1	3	3	-1	-1	-3	-3	1	1	-1	-1
$\chi_{26}^{(58)}$	-1	-1	-1	1	-3	-3	1	1	3	3	-1	-1	3	3	-1	-1	3	3	-1	-1	-3	-3	1	1	1	-1
$\chi_{26}^{(59)}$	1	1	1	-1	-3	-3	1	1	3	3	-1	-1	3	3	-1	-1	3	3	-1	-1	-3	-3	1	1	1	-1
$\chi_{26}^{(60)}$	-1	-1	-1	1	-3	-3	1	1	3	3	-1	-1	3	3	-1	-1	3	3	-1	-1	-3	-3	1	1	-1	1
$\chi_{26}^{(61)}$	-1	1	1	-1	3	3	-1	-1	3	3	-1	-1	3	3	-1	-1	-3	-3	1	1	-3	-3	1	1	1	-1
$\chi_{26}^{(62)}$	1	-1	-1	1	3	3	-1	-1	3	3	-1	-1	3	3	-1	-1	-3	-3	1	1	-3	-3	1	1	-1	1
$\chi_{26}^{(63)}$	-1	1	1	-1	3	3	-1	-1	3	3	-1	-1	3	3	-1	-1	-3	-3	1	1	-3	-3	1	1	-1	1
$\chi_{26}^{(64)}$	1	-1	-1	1	3	3	-1	-1	3	3	-1	-1	3	3	-1	-1	-3	-3	1	1	-3	-3	1	1	1	-1
$\chi_{26}^{(65)}$	-1	-1	-1	1	-3	-3	1	1	3	3	-1	-1	3	3	-1	-1	-3	-3	1	1	3	3	-1	-1	-1	1
$\chi_{26}^{(66)}$	1	1	1	-1	-3	-3	1	1	3	3	-1	-1	3	3	-1	-1	-3	-3	1	1	3	3	-1	-1	1	-1
$\chi_{26}^{(67)}$	-1	-1	-1	1	-3	-3	1	1	3	3	-1	-1	3	3	-1	-1	-3	-3	1	1	3	3	-1	-1	1	-1
$\chi_{26}^{(68)}$	1	1	1	-1	-3	-3	1	1	3	3	-1	-1	3	3	-1	-1	-3	-3	1	1	3	3	-1	-1	-1	1
$\chi_{26}^{(69)}$	1	-1	-1	1	3	3	-1	-1	3	3	-1	-1	3	3	-1	-1	3	3	-1	-1	3	3	-1	-1	1	-1
$\chi_{26}^{(70)}$	-1	1	1	-1	3	3	-1	-1	3	3	-1	-1	3	3	-1	-1	3	3	-1	-1	3	3	-1	-1	-1	1
$\chi_{26}^{(71)}$	1	-1	-1	1	3	3	-1	-1	3	3	-1	-1	3	3	-1	-1	3	3	-1	-1	3	3	-1	-1	-1	1
$\chi_{26}^{(72)}$	-1	1	1	-1	3	3	-1	-1	3	3	-1	-1	3	3	-1	-1	3	3	-1	-1	3	3	-1	-1	1	-1
$\chi_{26}^{(73)}$	.	.	.	.	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	2	2	2	2	2	2	2	2	.	.
$\chi_{26}^{(74)}$	.	.	.	.	2	2	2	2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	.	.
$\chi_{26}^{(75)}$	.	.	.	.	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	.	.
$\chi_{26}^{(76)}$	.	.	.	.	2	2	2	2	-2	-2	-2	-2	-2	-2	-2	-2	2	2	2	2	-2	-2	-2	-2	.	.
$\chi_{26}^{(77)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(78)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(79)}$	.	.	.	.	.	.	.	.	2	-2	-2	2	2	-2	-2	2	.	.	.	.	-2	2	2	-2	.	.
$\chi_{26}^{(80)}$	.	.	.	.	.	.	.	.	2	-2	-2	2	2	-2	-2	2	.	.	.	.	-2	2	2	-2	.	.
$\chi_{26}^{(81)}$	.	.	.	.	.	.	.	.	2	-2	-2	2	2	-2	-2	2	.	.	.	.	2	-2	-2	2	.	.
$\chi_{26}^{(82)}$	.	.	.	.	.	.	.	.	2	-2	-2	2	2	-2	-2	2	.	.	.	.	2	-2	-2	2	.	.
$\chi_{26}^{(83)}$	.	.	.	.	.	.	.	.	2	-2	-2	2	2	-2	-2	2	.	.	.	.	-2	2	2	-2	-2	2
$\chi_{26}^{(84)}$	.	.	.	.	.	.	.	.	2	-2	-2	2	2	-2	-2	2	.	.	.	.	-2	2	2	-2	2	-2
$\chi_{26}^{(85)}$	.	.	.	.	.	.	.	.	2	-2	-2	2	2	-2	-2	2	.	.	.	.	2	-2	-2	2	-2	2
$\chi_{26}^{(86)}$	.	.	.	.	.	.	.	.	2	-2	-2	2	2	-2	-2	2	.	.	.	.	2	-2	-2	2	2	-2
$\chi_{26}^{(87)}$	.	.	.	.	.	.	.	.	-2	-2	-2	-2	2	2	2	2	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(88)}$	.	.	.	.	.	.	.	.	-2	-2	-2	-2	2	2	2	2	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(89)}$	.	-4	4	.	.	.	.	.	-2	2	2	-2	2	-2	-2	2	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(90)}$	.	4	-4	.	.	.	.	.	-2	2	2	-2	2	-2	-2	2	.	.	.	.	.	.	.	.	.	.

	130								140								150							
$\chi_{26}^{(56)}$	.	-2	2	-2	2	2	-2	2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-2
$\chi_{26}^{(57)}$	1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	.	.	.	.	.	.	.
$\chi_{26}^{(58)}$	-1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	.	.	.	.	.	.	.
$\chi_{26}^{(59)}$	-1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	.	.	.	.	.	.	.
$\chi_{26}^{(60)}$	1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	.	.	.	.	.	.	.
$\chi_{26}^{(61)}$	-1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	.	.	.	.	.	.	.
$\chi_{26}^{(62)}$	1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	.	.	.	.	.	.	.
$\chi_{26}^{(63)}$	1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	.	.	.	.	.	.	.
$\chi_{26}^{(64)}$	-1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	.	.	.	.	.	.	.
$\chi_{26}^{(65)}$	1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	.	.	.	.	.	.	.
$\chi_{26}^{(66)}$	-1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	.	.	.	.	.	.	.
$\chi_{26}^{(67)}$	-1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	.	.	.	.	.	.	.
$\chi_{26}^{(68)}$	1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	.	.	.	.	.	.	.
$\chi_{26}^{(69)}$	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	.	.	.	.	.	.	.
$\chi_{26}^{(70)}$	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	.	.	.	.	.	.	.
$\chi_{26}^{(71)}$	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	.	.	.	.	.	.	.
$\chi_{26}^{(72)}$	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	.	.	.	.	.	.	.
$\chi_{26}^{(73)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	-1	-1	-1	1	1	1
$\chi_{26}^{(74)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1	-1	-1	-1	-1	1
$\chi_{26}^{(75)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1	1	1	1	1	1
$\chi_{26}^{(76)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	-1	1	1	-1	-1	1
$\chi_{26}^{(77)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-2
$\chi_{26}^{(78)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-2
$\chi_{26}^{(79)}$	.	-2	2	2	-2	-2	2	2	-2	.	.	.	.	2	-2	-2	2	.	.	.	.	.	.	.
$\chi_{26}^{(80)}$	.	2	-2	-2	2	2	-2	-2	2	.	.	.	.	-2	2	2	-2	.	.	.	.	.	.	.
$\chi_{26}^{(81)}$	.	-2	2	2	-2	-2	2	2	-2	.	.	.	.	-2	2	2	-2	.	.	.	.	.	.	.
$\chi_{26}^{(82)}$	.	2	-2	-2	2	2	-2	-2	2	.	.	.	.	2	-2	-2	2	.	.	.	.	.	.	.
$\chi_{26}^{(83)}$	-2	.	.	.	.	.	.	.	.	2	-2	-2	2	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(84)}$	2	.	.	.	.	.	.	.	.	-2	2	2	-2	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(85)}$	-2	.	.	.	.	.	.	.	.	-2	2	2	-2	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(86)}$	2	.	.	.	.	.	.	.	.	2	-2	-2	2	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(87)}$	.	2	2	2	2	-2	-2	-2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(88)}$	.	-2	-2	-2	-2	2	2	2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(89)}$	.	2	-2	-2	2	-2	2	2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(90)}$	.	2	-2	-2	2	-2	2	2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(91)}$	.	-2	2	2	-2	2	-2	-2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(92)}$	.	-2	2	2	-2	2	-2	-2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(93)}$	1	-1	1	-1	1	-1	1	-1	1	1	-1	1	-1	1	-1	1	-1	-1	1	-1	1	1	-1	1
$\chi_{26}^{(94)}$	-1	1	-1	1	-1	1	-1	1	-1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	1	-1	1
$\chi_{26}^{(95)}$	-1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	1	-1	1	-1	1	-1	-1	1	-1	1	1
$\chi_{26}^{(96)}$	1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	-1	1	-1	1	1	-1	-1	1	-1	1	1
$\chi_{26}^{(97)}$	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	1	-1	1	-1	1	-1	1
$\chi_{26}^{(98)}$	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1
$\chi_{26}^{(99)}$	-1	-1	1	-1	1	-1	1	-1	1	1	-1	1	-1	-1	1	-1	1	1	1	-1	-1	1	-1	1
$\chi_{26}^{(100)}$	1	1	-1	1	-1	1	-1	1	-1	-1	1	-1	1	1	-1	1	-1	-1	1	1	-1	-1	1	1

	130										140										150									
$\chi_{26}^{(101)}$	-1	1	-1	1	-1	1	-1	1	-1	-1	1	-1	1	-1	1	1							
$\chi_{26}^{(102)}$	1	-1	1	-1	1	-1	1	-1	1	1	-1	1	-1	1	-1	1	-1							
$\chi_{26}^{(103)}$	1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	-1	1	-1	1							
$\chi_{26}^{(104)}$	-1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	1	-1	1	-1							
$\chi_{26}^{(105)}$	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1							
$\chi_{26}^{(106)}$	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1	-1	1							
$\chi_{26}^{(107)}$	1	1	-1	1	-1	1	-1	1	-1	-1	1	-1	1	1	-1	1	-1							
$\chi_{26}^{(108)}$	-1	-1	1	-1	1	-1	1	-1	1	1	-1	1	-1	-1	1	-1	1							
$\chi_{26}^{(109)}$	.	-2	-2	2	2	2	2	-2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(110)}$	.	2	2	-2	-2	-2	-2	2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(111)}$	.	2	2	-2	-2	-2	-2	2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(112)}$	.	-2	-2	2	2	2	2	-2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(113)}$	1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1							
$\chi_{26}^{(114)}$	-1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1							
$\chi_{26}^{(115)}$	-1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1							
$\chi_{26}^{(116)}$	1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1							
$\chi_{26}^{(117)}$	1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1							
$\chi_{26}^{(118)}$	-1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1							
$\chi_{26}^{(119)}$	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1							
$\chi_{26}^{(120)}$	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1							
$\chi_{26}^{(121)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2
$\chi_{26}^{(122)}$	1	-1	1	-1	-1	1	-1						
$\chi_{26}^{(123)}$	-1	1	1	-1	1	-1	-1						
$\chi_{26}^{(124)}$	-1	1	-1	1	-1	1	-1						
$\chi_{26}^{(125)}$	1	-1	-1	1	1	-1	-1						
$\chi_{26}^{(126)}$	-1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	-1	1	1	-1							
$\chi_{26}^{(127)}$	1	1	-1	-1	1	1	-1	-1	1	-1	1	1	-1	-1	1	1	-1							
$\chi_{26}^{(128)}$	-1	-1	1	1	-1	-1	1	1	-1	1	-1	-1	1	1	-1	-1	1							
$\chi_{26}^{(129)}$	1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	1	-1	-1	1							
$\chi_{26}^{(130)}$	-1	1	-1	-1	1	1	-1	-1	1	-1	1	1	-1	1	-1	-1	1							
$\chi_{26}^{(131)}$	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1							
$\chi_{26}^{(132)}$	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1							
$\chi_{26}^{(133)}$	1	-1	1	1	-1	-1	1	1	-1	1	-1	-1	1	-1	1	1	-1							
$\chi_{26}^{(134)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(135)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(136)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(137)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(138)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(139)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(140)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(141)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(142)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(143)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(144)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(145)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

	160																
$\chi_{26}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
$\chi_{26}^{(2)}$	1	1	1	-1	1	1	1	-1	-1	-1	1	1	1	1	1	-1	-1
$\chi_{26}^{(3)}$	1	1	1	1	-1	-1	-1	1	1	-1	1	1	1	1	1	-1	-1
$\chi_{26}^{(4)}$	1	1	1	1	-1	-1	1	-1	-1	-1	1	1	1	1	-1	1	1
$\chi_{26}^{(5)}$	1	1	1	-1	1	1	-1	1	1	-1	1	1	1	1	-1	1	1
$\chi_{26}^{(6)}$	1	1	1	1	1	1	-1	-1	-1	1	1	1	1	1	-1	-1	-1
$\chi_{26}^{(7)}$	1	1	1	-1	-1	-1	1	1	1	1	1	1	1	1	-1	-1	-1
$\chi_{26}^{(8)}$	1	1	1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1
$\chi_{26}^{(9)}$	2	-2	-2	.	.	.	.	-2	2	.	-2	-2	2	2	.	.	.
$\chi_{26}^{(10)}$	2	-2	-2	.	.	.	.	2	-2	.	-2	-2	2	2	.	.	.
$\chi_{26}^{(11)}$	.	.	.	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1
$\chi_{26}^{(12)}$	.	.	.	-1	-1	-1	1	1	1	-1	-1	-1	-1	-1	1	1	1
$\chi_{26}^{(13)}$	.	.	.	-1	1	1	1	-1	-1	1	-1	-1	-1	-1	-1	1	1
$\chi_{26}^{(14)}$	.	.	.	1	-1	-1	-1	1	1	1	-1	-1	-1	-1	-1	1	1
$\chi_{26}^{(15)}$	.	.	.	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_{26}^{(16)}$	.	.	.	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_{26}^{(17)}$	.	.	.	1	-1	-1	1	-1	-1	1	-1	-1	-1	-1	1	-1	-1
$\chi_{26}^{(18)}$	.	.	.	-1	1	1	-1	1	1	1	-1	-1	-1	-1	1	-1	-1
$\chi_{26}^{(19)}$	.	.	.	.	.	.	.	.	.	2	2	2	2	2	-2	-2	-2
$\chi_{26}^{(20)}$	.	.	.	.	.	.	.	.	.	2	2	2	2	2	-2	-2	-2

[illegible]

[illegible]

	160															
$\chi_{26}^{(156)}$
$\chi_{26}^{(157)}$	2	2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{26}^{(158)}$	4	-4	-4	4	.	.	.
$\chi_{26}^{(159)}$	4	-4	-4	4	.	.	.
$\chi_{26}^{(160)}$	2	-2	2	-2	.	-2	2
$\chi_{26}^{(161)}$	2	-2	2	-2	.	2	-2
$\chi_{26}^{(162)}$	2	-2	.	.	.	-2	2	2	-2	.	.	.
$\chi_{26}^{(163)}$	-2	2	.	.	.	-2	2	2	-2	.	.	.
$\chi_{26}^{(164)}$
$\chi_{26}^{(165)}$
$\chi_{26}^{(166)}$
$\chi_{26}^{(167)}$

The generators of $G^{s_{27}}$ are:

$$\begin{pmatrix} 0 & 1 & 2 & -2 & 0 & 0 & 0 & 0 \\ 0 & 1 & 3 & -3 & 1 & -1 & 0 & 1 \\ 0 & 1 & 4 & -4 & 1 & 0 & -1 & 1 \\ 1 & 2 & 5 & -6 & 2 & -1 & -1 & 2 \\ 1 & 1 & 4 & -4 & 1 & -1 & -1 & 2 \\ 1 & 1 & 3 & -3 & 1 & -1 & -1 & 1 \\ 1 & 0 & 2 & -2 & 1 & -1 & 0 & 0 \\ 1 & 0 & 1 & -1 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 0 & 0 & 2 & -2 & 1 & -1 \\ 0 & -1 & 0 & 0 & 2 & -2 & 2 & -3 \\ 0 & -2 & -1 & 1 & 3 & -3 & 2 & -3 \\ 0 & -2 & -1 & 1 & 4 & -4 & 3 & -5 \\ 0 & -1 & -1 & 0 & 4 & -3 & 2 & -4 \\ 0 & -1 & -1 & 0 & 3 & -2 & 2 & -3 \\ -1 & -1 & 0 & 0 & 2 & -1 & 1 & -2 \\ -1 & 0 & 0 & 0 & 1 & -1 & 1 & -1 \end{pmatrix}.$$

The representatives of conjugacy classes of $G^{s_{27}}$ are:

$$\begin{pmatrix} 1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 1 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 1 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} -2 & -1 & 1 & 1 & -1 & 1 & 0 & -1 \\ -2 & -2 & 2 & 1 & -2 & 2 & 0 & -1 \\ -3 & -2 & 2 & 2 & -3 & 3 & -1 & -1 \\ -4 & -3 & 3 & 3 & -5 & 4 & 0 & -2 \\ -3 & -2 & 2 & 2 & -4 & 4 & 0 & -2 \\ -3 & -1 & 2 & 1 & -3 & 3 & 0 & -1 \\ -2 & -1 & 1 & 1 & -2 & 2 & 0 & -1 \\ -1 & 0 & 1 & 0 & -1 & 1 & 0 & -1 \end{pmatrix}, \begin{pmatrix} -1 & -2 & 1 & 1 & -1 & 1 & 0 & 0 \\ -3 & -2 & 2 & 1 & -1 & 1 & 0 & 0 \\ -3 & -3 & 2 & 2 & -2 & 2 & -1 & 1 \\ -5 & -4 & 3 & 3 & -3 & 2 & 0 & 1 \\ -4 & -3 & 2 & 2 & -2 & 2 & 0 & 1 \\ -3 & -2 & 2 & 1 & -2 & 2 & 0 & 1 \\ -2 & -2 & 1 & 1 & -1 & 1 & 0 & 1 \\ -1 & -1 & 1 & 0 & 0 & 0 & 0 & 1 \end{pmatrix},$$

$$\begin{pmatrix} -1 & -1 & 0 & 1 & 0 & -1 & 0 & 1 \\ -1 & -1 & 0 & 1 & 0 & -1 & 0 & 0 \\ -1 & -1 & -1 & 2 & 0 & -2 & 0 & 1 \\ -2 & -1 & 0 & 2 & 0 & -3 & 0 & 1 \\ -2 & 0 & 0 & 1 & 0 & -2 & 0 & 1 \\ -1 & 0 & 0 & 0 & 1 & -2 & 0 & 1 \\ -1 & 0 & 0 & 0 & 1 & -1 & -1 & 1 \\ -1 & 0 & 0 & 0 & 1 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 1 & 0 & -1 & 2 & 0 & -1 \\ -2 & -2 & 2 & 0 & -1 & 2 & 0 & 0 \\ -2 & -2 & 2 & 0 & -2 & 4 & -1 & 0 \\ -3 & -3 & 3 & 0 & -3 & 5 & 0 & 0 \\ -2 & -3 & 2 & 1 & -3 & 4 & 0 & 0 \\ -2 & -2 & 2 & 1 & -3 & 3 & 0 & 0 \\ -1 & -2 & 1 & 1 & -2 & 2 & 0 & 0 \\ 0 & -1 & 1 & 0 & -1 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & -1 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & -1 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & -1 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & -1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & -1 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & -1 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & -1 \end{pmatrix},$$

$$\begin{pmatrix} -1 & 0 & 0 & 1 & -1 & -1 & 2 & 0 \\ -1 & 1 & 0 & 1 & -2 & -1 & 3 & -1 \\ -2 & 0 & 0 & 2 & -2 & -2 & 4 & -1 \\ -3 & 1 & 0 & 3 & -4 & -2 & 5 & -1 \\ -3 & 1 & 0 & 2 & -3 & -1 & 4 & -1 \\ -2 & 1 & 0 & 1 & -2 & -1 & 3 & 0 \\ -2 & 1 & 1 & 0 & -1 & -1 & 2 & 0 \\ -1 & 1 & 0 & 0 & 0 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 1 & 0 & 0 & -1 & 0 & 2 & -1 \\ 0 & 1 & 0 & 0 & -2 & 0 & 3 & -1 \\ -1 & 1 & 0 & 0 & -2 & 0 & 4 & -2 \\ -1 & 2 & 0 & 0 & -4 & 1 & 5 & -2 \\ -1 & 1 & 0 & 1 & -4 & 1 & 4 & -2 \\ -1 & 1 & 0 & 1 & -3 & 0 & 3 & -1 \\ -1 & 1 & 1 & 0 & -2 & 0 & 2 & -1 \\ 0 & 1 & 0 & 0 & -1 & 0 & 1 & -1 \end{pmatrix}, \begin{pmatrix} -1 & 1 & 0 & 0 & -1 & 1 & -1 & 2 \\ -1 & 2 & 0 & 0 & -2 & 2 & -2 & 2 \\ -2 & 3 & 1 & -1 & -2 & 2 & -2 & 3 \\ -3 & 4 & 1 & -1 & -3 & 3 & -3 & 4 \\ -3 & 3 & 1 & 0 & -3 & 2 & -2 & 3 \\ -2 & 2 & 1 & 0 & -2 & 1 & -2 & 3 \\ -1 & 2 & 0 & 0 & -1 & 0 & -1 & 2 \\ -1 & 1 & 0 & 0 & 0 & 0 & -1 & 1 \end{pmatrix},$$

$$\begin{pmatrix} -1 & 1 & 0 & 1 & -2 & 1 & -1 & 1 \\ 0 & 1 & 0 & 1 & -3 & 2 & -2 & 2 \\ -1 & 2 & 1 & 1 & -4 & 2 & -2 & 2 \\ -1 & 2 & 1 & 2 & -6 & 3 & -3 & 3 \\ -1 & 2 & 1 & 1 & -5 & 3 & -2 & 2 \\ -1 & 2 & 1 & 0 & -3 & 2 & -2 & 2 \\ 0 & 2 & 0 & 0 & -2 & 1 & -1 & 1 \\ 0 & 1 & 0 & 0 & -1 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 1 & 2 & -2 & 1 & -1 & 0 & 1 \\ -1 & 2 & 3 & -3 & 1 & -1 & 0 & 0 \\ -2 & 2 & 4 & -4 & 2 & -1 & -1 & 1 \\ -2 & 4 & 5 & -6 & 3 & -2 & -1 & 1 \\ -2 & 3 & 4 & -4 & 2 & -2 & -1 & 1 \\ -1 & 2 & 3 & -3 & 2 & -2 & -1 & 1 \\ -1 & 1 & 2 & -2 & 2 & -2 & 0 & 0 \\ -1 & 1 & 1 & -1 & 1 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 1 & 2 & -1 & 0 & -1 & 0 & 0 \\ 0 & 1 & 3 & -2 & 0 & -1 & 0 & 0 \\ -1 & 1 & 4 & -2 & 0 & -1 & -1 & 0 \\ 0 & 2 & 5 & -3 & 0 & -2 & -1 & 0 \\ 0 & 2 & 4 & -3 & 0 & -1 & -1 & 0 \\ 0 & 2 & 3 & -3 & 1 & -1 & -1 & 0 \\ 0 & 1 & 2 & -2 & 1 & -1 & 0 & -1 \\ 0 & 1 & 1 & -1 & 0 & 0 & 0 & -1 \end{pmatrix}, \\
\begin{pmatrix} 0 & -1 & -2 & 2 & 0 & 0 & 0 & 0 \\ 0 & -1 & -3 & 3 & -1 & 1 & 0 & -1 \\ 0 & -1 & -4 & 4 & -1 & 0 & 1 & -1 \\ -1 & -2 & -5 & 6 & -2 & 1 & 1 & -2 \\ -1 & -1 & -4 & 4 & -1 & 1 & 1 & -2 \\ -1 & -1 & -3 & 3 & -1 & 1 & 1 & -1 \\ -1 & 0 & -2 & 2 & -1 & 1 & 0 & 0 \\ -1 & 0 & -1 & 1 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 0 & 0 & 0 & 0 & 0 & 1 \\ -1 & -1 & 0 & 0 & 1 & -1 & 0 & 1 \\ 0 & -1 & -1 & 0 & 1 & -1 & 0 & 2 \\ -1 & -1 & 0 & -1 & 2 & -2 & 0 & 3 \\ -1 & -1 & 0 & 0 & 1 & -2 & 0 & 3 \\ 0 & -1 & 0 & 0 & 1 & -2 & 0 & 2 \\ 0 & -1 & 0 & 0 & 1 & -1 & -1 & 2 \\ 0 & -1 & 0 & 0 & 1 & -1 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 0 & 0 & 2 & -2 & 1 & -1 \\ 0 & -1 & 0 & 0 & 2 & -2 & 2 & -3 \\ 0 & -2 & -1 & 1 & 3 & -3 & 2 & -3 \\ 0 & -2 & -1 & 1 & 4 & -4 & 3 & -5 \\ 0 & -1 & -1 & 0 & 4 & -3 & 2 & -4 \\ 0 & -1 & -1 & 0 & 3 & -2 & 2 & -3 \\ -1 & -1 & 0 & 0 & 2 & -1 & 1 & -2 \\ -1 & 0 & 0 & 0 & 1 & -1 & 1 & -1 \end{pmatrix}, \\
\begin{pmatrix} 0 & -1 & 0 & 1 & -1 & 0 & 0 & 0 \\ 0 & -2 & 0 & 1 & 0 & -1 & 0 & 1 \\ 1 & -2 & -1 & 2 & -1 & -1 & 0 & 1 \\ 1 & -3 & 0 & 2 & -1 & -2 & 0 & 2 \\ 1 & -2 & 0 & 1 & -1 & -1 & 0 & 2 \\ 1 & -1 & 0 & 0 & 0 & -1 & 0 & 1 \\ 1 & -1 & 0 & 0 & 0 & 0 & -1 & 1 \\ 1 & -1 & 0 & 0 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 & -2 & 1 & 0 & 1 & 0 & -1 \\ 1 & -1 & -3 & 2 & -1 & 2 & 0 & -1 \\ 1 & 0 & -4 & 2 & -1 & 2 & 1 & -2 \\ 1 & -1 & -5 & 3 & -2 & 4 & 1 & -3 \\ 1 & -1 & -4 & 3 & -2 & 3 & 1 & -3 \\ 0 & -1 & -3 & 3 & -2 & 2 & 1 & -2 \\ 0 & 0 & -2 & 2 & -2 & 2 & 0 & -1 \\ 0 & 0 & -1 & 1 & -1 & 1 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 0 & -1 & 2 & -1 & 1 & -2 \\ 1 & -1 & 0 & -1 & 2 & -1 & 2 & -3 \\ 1 & -1 & -1 & -1 & 3 & -1 & 2 & -4 \\ 2 & -1 & -1 & -2 & 4 & -1 & 3 & -6 \\ 2 & -1 & -1 & -1 & 3 & -1 & 2 & -5 \\ 1 & -1 & -1 & 0 & 2 & -1 & 2 & -4 \\ 0 & -1 & 0 & 0 & 1 & 0 & 1 & -3 \\ 0 & 0 & 0 & 0 & 0 & 0 & 1 & -2 \end{pmatrix}, \\
\begin{pmatrix} 0 & 0 & 0 & -1 & 2 & 0 & -2 & 1 \\ 0 & 0 & 0 & -1 & 2 & 1 & -3 & 0 \\ 0 & 1 & 0 & -2 & 3 & 1 & -4 & 1 \\ 0 & 1 & 0 & -3 & 5 & 1 & -5 & 0 \\ 0 & 1 & 0 & -2 & 4 & 0 & -4 & 0 \\ 0 & 0 & 0 & -1 & 3 & 0 & -3 & 0 \\ 0 & 0 & -1 & 0 & 2 & 0 & -2 & 0 \\ -1 & 0 & 0 & 0 & 1 & 0 & -1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 0 & 0 & -1 & 0 & 2 & 0 \\ -1 & 1 & 0 & 0 & -1 & -1 & 3 & 0 \\ -1 & 0 & 0 & 0 & -1 & -1 & 4 & 0 \\ -2 & 1 & 0 & 0 & -2 & -1 & 5 & 1 \\ -2 & 0 & 0 & 1 & -2 & -1 & 4 & 1 \\ -1 & 0 & 0 & 1 & -2 & -1 & 3 & 1 \\ -1 & 0 & 1 & 0 & -1 & -1 & 2 & 1 \\ 0 & 0 & 0 & 0 & 0 & -1 & 1 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 0 & 0 & 1 & 0 & -2 & 0 \\ 1 & -1 & 0 & 0 & 1 & 1 & -3 & 0 \\ 1 & 0 & 0 & 0 & 1 & 1 & -4 & 0 \\ 2 & -1 & 0 & 0 & 2 & 1 & -5 & -1 \\ 2 & 0 & 0 & -1 & 2 & 1 & -4 & -1 \\ 1 & 0 & 0 & -1 & 2 & 1 & -3 & -1 \\ 1 & 0 & -1 & 0 & 1 & 1 & -2 & -1 \\ 0 & 0 & 0 & 0 & 0 & 1 & -1 & -1 \end{pmatrix}, \\
\begin{pmatrix} 0 & 0 & 0 & 1 & -2 & 0 & 2 & -1 \\ 0 & 0 & 0 & 1 & -2 & -1 & 3 & 0 \\ 0 & -1 & 0 & 2 & -3 & -1 & 4 & -1 \\ 0 & -1 & 0 & 3 & -5 & -1 & 5 & 0 \\ 0 & -1 & 0 & 2 & -4 & 0 & 4 & 0 \\ 0 & 0 & 0 & 1 & -3 & 0 & 3 & 0 \\ 0 & 0 & 1 & 0 & -2 & 0 & 2 & 0 \\ 1 & 0 & 0 & 0 & -1 & 0 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 0 & 1 & -2 & 1 & -1 & 2 \\ -1 & 1 & 0 & 1 & -2 & 1 & -2 & 3 \\ -1 & 1 & 1 & 1 & -3 & 1 & -2 & 4 \\ -2 & 1 & 1 & 2 & -4 & 1 & -3 & 6 \\ -2 & 1 & 1 & 1 & -3 & 1 & -2 & 5 \\ -1 & 1 & 1 & 0 & -2 & 1 & -2 & 4 \\ 0 & 1 & 0 & 0 & -1 & 0 & -1 & 3 \\ 0 & 0 & 0 & 0 & 0 & 0 & -1 & 2 \end{pmatrix}, \begin{pmatrix} 0 & 0 & 2 & -1 & 0 & -1 & 0 & 1 \\ -1 & 1 & 3 & -2 & 1 & -2 & 0 & 1 \\ -1 & 0 & 4 & -2 & 1 & -2 & -1 & 2 \\ -1 & 1 & 5 & -3 & 2 & -4 & -1 & 3 \\ -1 & 1 & 4 & -3 & 2 & -3 & -1 & 3 \\ 0 & 1 & 3 & -3 & 2 & -2 & -1 & 2 \\ 0 & 0 & 2 & -2 & 2 & -2 & 0 & 1 \\ 0 & 0 & 1 & -1 & 1 & -1 & 0 & 1 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} 0 & 1 & 0 & -1 & 1 & 0 & 0 & 0 \\ 0 & 2 & 0 & -1 & 0 & 1 & 0 & -1 \\ -1 & 2 & 1 & -2 & 1 & 1 & 0 & -1 \\ -1 & 3 & 0 & -2 & 1 & 2 & 0 & -2 \\ -1 & 2 & 0 & -1 & 1 & 1 & 0 & -2 \\ -1 & 1 & 0 & 0 & 0 & 1 & 0 & -1 \\ -1 & 1 & 0 & 0 & 0 & 0 & 1 & -1 \\ -1 & 1 & 0 & 0 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 0 & 0 & -2 & 2 & -1 & 1 \\ 0 & 1 & 0 & 0 & -2 & 2 & -2 & 3 \\ 0 & 2 & 1 & -1 & -3 & 3 & -2 & 3 \\ 0 & 2 & 1 & -1 & -4 & 4 & -3 & 5 \\ 0 & 1 & 1 & 0 & -4 & 3 & -2 & 4 \\ 0 & 1 & 1 & 0 & -3 & 2 & -2 & 3 \\ 1 & 1 & 0 & 0 & -2 & 1 & -1 & 2 \\ 1 & 0 & 0 & 0 & -1 & 1 & -1 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 0 & 0 & 0 & 0 & 0 & -1 \\ 1 & 1 & 0 & 0 & -1 & 1 & 0 & -1 \\ 0 & 1 & 1 & 0 & -1 & 1 & 0 & -2 \\ 1 & 1 & 0 & 1 & -2 & 2 & 0 & -3 \\ 1 & 1 & 0 & 0 & -1 & 2 & 0 & -3 \\ 0 & 1 & 0 & 0 & -1 & 2 & 0 & -2 \\ 0 & 1 & 0 & 0 & -1 & 1 & 1 & -2 \\ 0 & 1 & 0 & 0 & -1 & 1 & 0 & -1 \end{pmatrix}, \\
\begin{pmatrix} 0 & 1 & 2 & -2 & 0 & 0 & 0 & 0 \\ 0 & 1 & 3 & -3 & 1 & -1 & 0 & 1 \\ 0 & 1 & 4 & -4 & 1 & 0 & -1 & 1 \\ 1 & 2 & 5 & -6 & 2 & -1 & -1 & 2 \\ 1 & 1 & 4 & -4 & 1 & -1 & -1 & 2 \\ 1 & 1 & 3 & -3 & 1 & -1 & -1 & 1 \\ 1 & 0 & 2 & -2 & 1 & -1 & 0 & 0 \\ 1 & 0 & 1 & -1 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & -1 & -2 & 1 & 0 & 1 & 0 & 0 \\ 0 & -1 & -3 & 2 & 0 & 1 & 0 & 0 \\ 1 & -1 & -4 & 2 & 0 & 1 & 1 & 0 \\ 0 & -2 & -5 & 3 & 0 & 2 & 1 & 0 \\ 0 & -2 & -4 & 3 & 0 & 1 & 1 & 0 \\ 0 & -2 & -3 & 3 & -1 & 1 & 1 & 0 \\ 0 & -1 & -2 & 2 & -1 & 1 & 0 & 1 \\ 0 & -1 & -1 & 1 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 1 & -1 & -2 & 2 & -1 & 1 & 0 & -1 \\ 1 & -2 & -3 & 3 & -1 & 1 & 0 & 0 \\ 2 & -2 & -4 & 4 & -2 & 1 & 1 & -1 \\ 2 & -4 & -5 & 6 & -3 & 2 & 1 & -1 \\ 2 & -3 & -4 & 4 & -2 & 2 & 1 & -1 \\ 1 & -2 & -3 & 3 & -2 & 2 & 1 & -1 \\ 1 & -1 & -2 & 2 & -2 & 2 & 0 & 0 \\ 1 & -1 & -1 & 1 & -1 & 1 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 1 & -1 & 0 & -1 & 2 & -1 & 1 & -1 \\ 0 & -1 & 0 & -1 & 3 & -2 & 2 & -2 \\ 1 & -2 & -1 & -1 & 4 & -2 & 2 & -2 \\ 1 & -2 & -1 & -2 & 6 & -3 & 3 & -3 \\ 1 & -2 & -1 & -1 & 5 & -3 & 2 & -2 \\ 1 & -2 & -1 & 0 & 3 & -2 & 2 & -2 \\ 0 & -2 & 0 & 0 & 2 & -1 & 1 & -1 \\ 0 & -1 & 0 & 0 & 1 & -1 & 1 & 0 \end{pmatrix}, \begin{pmatrix} 1 & -1 & 0 & 0 & 1 & -1 & 1 & -2 \\ 1 & -2 & 0 & 0 & 2 & -2 & 2 & -2 \\ 2 & -3 & -1 & 1 & 2 & -2 & 2 & -3 \\ 3 & -4 & -1 & 1 & 3 & -3 & 3 & -4 \\ 3 & -3 & -1 & 0 & 3 & -2 & 2 & -3 \\ 2 & -2 & -1 & 0 & 2 & -1 & 2 & -3 \\ 1 & -2 & 0 & 0 & 1 & 0 & 1 & -2 \\ 1 & -1 & 0 & 0 & 0 & 0 & 1 & -1 \end{pmatrix}, \begin{pmatrix} 1 & -1 & 0 & 0 & 1 & 0 & -2 & 1 \\ 0 & -1 & 0 & 0 & 2 & 0 & -3 & 1 \\ 1 & -1 & 0 & 0 & 2 & 0 & -4 & 2 \\ 1 & -2 & 0 & 0 & 4 & -1 & -5 & 2 \\ 1 & -1 & 0 & -1 & 4 & -1 & -4 & 2 \\ 1 & -1 & 0 & -1 & 3 & 0 & -3 & 1 \\ 1 & -1 & -1 & 0 & 2 & 0 & -2 & 1 \\ 0 & -1 & 0 & 0 & 1 & 0 & -1 & 1 \end{pmatrix}, \\
\begin{pmatrix} 1 & 0 & 0 & -1 & 1 & 1 & -2 & 0 \\ 1 & -1 & 0 & -1 & 2 & 1 & -3 & 1 \\ 2 & 0 & 0 & -2 & 2 & 2 & -4 & 1 \\ 3 & -1 & 0 & -3 & 4 & 2 & -5 & 1 \\ 3 & -1 & 0 & -2 & 3 & 1 & -4 & 1 \\ 2 & -1 & 0 & -1 & 2 & 1 & -3 & 0 \\ 2 & -1 & -1 & 0 & 1 & 1 & -2 & 0 \\ 1 & -1 & 0 & 0 & 0 & 1 & -1 & 0 \end{pmatrix}, \begin{pmatrix} -2 & -1 & 1 & 0 & 0 & 1 & 0 & 0 \\ -3 & -1 & 2 & 0 & -1 & 2 & 0 & -1 \\ -4 & -1 & 2 & 0 & -1 & 3 & -1 & 0 \\ -6 & -1 & 3 & 0 & -2 & 4 & 0 & -1 \\ -5 & -1 & 2 & 1 & -2 & 3 & 0 & -1 \\ -4 & -1 & 2 & 1 & -2 & 2 & 0 & 0 \\ -3 & -1 & 1 & 1 & -1 & 1 & 0 & 0 \\ -2 & 0 & 1 & 0 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 1 & -1 & 0 & 1 & -2 & 0 & 1 \\ 2 & 2 & -2 & 0 & 1 & -2 & 0 & 0 \\ 2 & 2 & -2 & 0 & 2 & -4 & 1 & 0 \\ 3 & 3 & -3 & 0 & 3 & -5 & 0 & 0 \\ 2 & 3 & -2 & -1 & 3 & -4 & 0 & 0 \\ 2 & 2 & -2 & -1 & 3 & -3 & 0 & 0 \\ 1 & 2 & -1 & -1 & 2 & -2 & 0 & 0 \\ 0 & 1 & -1 & 0 & 1 & -1 & 0 & 0 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} 1 & 1 & 0 & -1 & 0 & 1 & 0 & -1 \\ 1 & 1 & 0 & -1 & 0 & 1 & 0 & 0 \\ 1 & 1 & 1 & -2 & 0 & 2 & 0 & -1 \\ 2 & 1 & 0 & -2 & 0 & 3 & 0 & -1 \\ 2 & 0 & 0 & -1 & 0 & 2 & 0 & -1 \\ 1 & 0 & 0 & 0 & -1 & 2 & 0 & -1 \\ 1 & 0 & 0 & 0 & -1 & 1 & 1 & -1 \\ 1 & 0 & 0 & 0 & -1 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 2 & -1 & -1 & 1 & -1 & 0 & 0 \\ 3 & 2 & -2 & -1 & 1 & -1 & 0 & 0 \\ 3 & 3 & -2 & -2 & 2 & -2 & 1 & -1 \\ 5 & 4 & -3 & -3 & 3 & -2 & 0 & -1 \\ 4 & 3 & -2 & -2 & 2 & -2 & 0 & -1 \\ 3 & 2 & -2 & -1 & 2 & -2 & 0 & -1 \\ 2 & 2 & -1 & -1 & 1 & -1 & 0 & -1 \\ 1 & 1 & -1 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 2 & 1 & -1 & -1 & 1 & -1 & 0 & 1 \\ 2 & 2 & -2 & -1 & 2 & -2 & 0 & 1 \\ 3 & 2 & -2 & -2 & 3 & -3 & 1 & 1 \\ 4 & 3 & -3 & -3 & 5 & -4 & 0 & 2 \\ 3 & 2 & -2 & -2 & 4 & -4 & 0 & 2 \\ 3 & 1 & -2 & -1 & 3 & -3 & 0 & 1 \\ 2 & 1 & -1 & -1 & 2 & -2 & 0 & 1 \\ 1 & 0 & -1 & 0 & 1 & -1 & 0 & 1 \end{pmatrix}, \\
\begin{pmatrix} 2 & 1 & -1 & 0 & 0 & -1 & 0 & 0 \\ 3 & 1 & -2 & 0 & 1 & -2 & 0 & 1 \\ 4 & 1 & -2 & 0 & 1 & -3 & 1 & 0 \\ 6 & 1 & -3 & 0 & 2 & -4 & 0 & 1 \\ 5 & 1 & -2 & -1 & 2 & -3 & 0 & 1 \\ 4 & 1 & -2 & -1 & 2 & -2 & 0 & 0 \\ 3 & 1 & -1 & -1 & 1 & -1 & 0 & 0 \\ 2 & 0 & -1 & 0 & 0 & 0 & 0 & 0 \end{pmatrix}.$$

The character table of $G^{s_{27}}$:

	10										20												
$\chi_{27}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{27}^{(2)}$	1	1	1	-1	-1	1	-1	1	-1	1	-1	1	-1	-1	1	1	-1	1	1	-1	1	1	-1
$\chi_{27}^{(3)}$	1	1	1	1	-1	-1	1	-1	-1	1	-1	1	1	-1	1	-1	-1	-1	-1	1	1	1	-1
$\chi_{27}^{(4)}$	1	1	1	-1	1	-1	-1	1	1	1	1	-1	-1	-1	-1	-1	1	-1	1	-1	1	1	1
$\chi_{27}^{(5)}$	1	-1	1	C	-C	-1	C	-1	C	-1	C	-1	C	1	C	-C	-1	-1	C	1	-1	-C	1
$\chi_{27}^{(6)}$	1	-1	1	-C	C	-1	-C	-1	-C	-1	-C	-1	-C	1	-C	C	-1	-1	-C	1	-1	C	1
$\chi_{27}^{(7)}$	1	-1	1	-C	-C	1	-C	1	C	-1	C	-1	-C	-1	-C	C	1	1	C	-1	-1	C	1
$\chi_{27}^{(8)}$	1	-1	1	C	C	1	C	1	-C	-1	-C	-1	C	-1	C	-C	1	1	-C	-1	-1	-C	1
$\chi_{27}^{(9)}$	1	A	A	-1	-A	1	-/A	/A	-B	B	-/B	/B	-/B	1	-B	-1	/B	B	-/A	/A	/A	-/A	B
$\chi_{27}^{(10)}$	1	B	B	-1	-B	1	-/B	/B	-/A	/A	-A	A	-A	1	-/A	-1	A	/A	-/B	/B	/B	-/B	/A
$\chi_{27}^{(11)}$	1	/B	/B	-1	-/B	1	-B	B	-A	A	-/A	/A	-/A	1	-A	-1	/A	A	-B	B	B	-B	A
$\chi_{27}^{(12)}$	1	/A	/A	-1	-/A	1	-A	A	-/B	/B	-B	B	-B	1	-/B	-1	B	/B	-A	A	A	-A	/B
$\chi_{27}^{(13)}$	1	A	A	1	-A	-1	/A	-/A	-B	B	-/B	/B	/B	-1	B	1	-/B	-B	-/A	-/A	/A	/A	B
$\chi_{27}^{(14)}$	1	B	B	1	-B	-1	/B	-/B	-/A	/A	-A	A	A	-1	/A	1	-A	-/A	-/B	-/B	/B	/B	/A
$\chi_{27}^{(15)}$	1	/B	/B	1	-/B	-1	B	-B	-A	A	-/A	/A	/A	-1	A	1	-/A	-A	-B	-B	B	B	A
$\chi_{27}^{(16)}$	1	/A	/A	1	-/A	-1	A	-A	-/B	/B	-B	B	B	-1	/B	1	-B	-/B	-A	-A	A	A	/B
$\chi_{27}^{(17)}$	1	/A	/A	-1	/A	-1	-A	-A	/B	/B	B	B	-B	-1	-/B	-1	-B	-/B	A	-A	A	-A	/B
$\chi_{27}^{(18)}$	1	/B	/B	-1	/B	-1	-B	-B	A	A	/A	/A	-/A	-1	-A	-1	-/A	-A	B	-B	B	-B	A
$\chi_{27}^{(19)}$	1	B	B	-1	B	-1	-/B	-/B	/A	/A	A	A	-A	-1	-/A	-1	-A	-/A	/B	-/B	/B	-/B	/A
$\chi_{27}^{(20)}$	1	A	A	-1	A	-1	-/A	-/A	B	B	/B	/B	-/B	-1	-B	-1	-/B	-B	/A	-/A	/A	-/A	B
$\chi_{27}^{(21)}$	1	/A	/A	1	/A	1	A	A	/B	/B	B	B	B	1	/B	1	B	/B	A	A	A	A	/B
$\chi_{27}^{(22)}$	1	/B	/B	1	/B	1	B	B	A	A	/A	/A	/A	1	A	1	/A	A	B	B	B	B	A
$\chi_{27}^{(23)}$	1	B	B	1	B	1	/B	/B	/A	/A	A	A	A	1	/A	1	A	/A	/B	/B	/B	/B	/A
$\chi_{27}^{(24)}$	1	A	A	1	A	1	/A	/A	B	B	/B	/B	/B	1	B	1	/B	B	/A	/A	/A	/A	B
$\chi_{27}^{(25)}$	1	-/A	/A	C	D	-1	/D	-A	/E	-/B	-E	-B	-E	1	/E	-C	-B	-/B	/D	A	-A	-/D	/B
$\chi_{27}^{(26)}$	1	-A	A	C	-/D	-1	-D	-/A	-E	-B	/E	-/B	/E	1	-E	-C	-/B	-B	-D	/A	-/A	D	/B
$\chi_{27}^{(27)}$	1	-B	B	C	E	-1	/E	-/B	-D	-/A	/D	-A	/D	1	-D	-C	-A	-/A	/E	/B	-/B	-/E	/A
$\chi_{27}^{(28)}$	1	-/B	/B	C	-/E	-1	-E	-B	/D	-A	-D	-/A	-D	1	/D	-C	-/A	-A	-E	B	-B	E	A
$\chi_{27}^{(29)}$	1	-/B	/B	-C	/E	-1	E	-B	-/D	-A	D	-/A	D	1	-/D	C	-/A	-A	E	B	-B	-E	A
$\chi_{27}^{(30)}$	1	-B	B	-C	-E	-1	-/E	-/B	D	-/A	-/D	-A	-/D	1	D	C	-A	-/A	-/E	/B	-/B	/E	/A
$\chi_{27}^{(31)}$	1	-A	A	-C	/D	-1	D	-/A	E	-B	-/E	-/B	-/E	1	E	C	-/B	-B	D	/A	-/A	-D	B
$\chi_{27}^{(32)}$	1	-/A	/A	-C	-D	-1	-/D	-A	-/E	-/B	E	-B	E	1	-/E	C	-B	-/B	-/D	A	-A	/D	/B
$\chi_{27}^{(33)}$	1	-/A	/A	-C	D	1	-/D	A	/E	-/B	-E	-B	E	-1	-/E	C	B	/B	/D	-A	-A	/D	/B
$\chi_{27}^{(34)}$	1	-A	A	-C	-/D	1	D	/A	-E	-B	/E	-/B	-/E	-1	E	C	/B	B	-D	-/A	-/A	-D	B
$\chi_{27}^{(35)}$	1	-B	B	-C	E	1	-/E	/B	-D	-/A	/D	-A	-/D	-1	D	C	A	/A	/E	-/B	-/B	/E	/A
$\chi_{27}^{(36)}$	1	-/B	/B	-C	-/E	1	E	B	/D	-A	-D	-/A	D	-1	-/D	C	/A	A	-E	-B	-B	-E	A
$\chi_{27}^{(37)}$	1	-/B	/B	C	/E	1	-E	B	-/D	-A	D	-/A	-D	-1	/D	-C	/A	A	E	-B	-B	E	A
$\chi_{27}^{(38)}$	1	-B	B	C	-E	1	/E	/B	D	-/A	-/D	-A	/D	-1	-D	-C	A	/A	-/E	-/B	-/B	-/E	/A
$\chi_{27}^{(39)}$	1	-A	A	C	/D	1	-D	/A	E	-B	-/E	-/B	/E	-1	-E	-C	/B	B	D	-/A	-/A	D	B
$\chi_{27}^{(40)}$	1	-/A	/A	C	-D	1	/D	A	-/E	-/B	E	-B	-E	-1	/E	-C	B	/B	-/D	-A	-A	-/D	/B

	30												40		
$\chi_{27}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{27}^{(2)}$	-1	1	-1	1	-1	1	-1	1	-1	-1	-1	-1	1	1	-1
$\chi_{27}^{(3)}$	-1	1	-1	-1	1	-1	1	1	-1	-1	1	-1	-1	-1	1
$\chi_{27}^{(4)}$	1	1	1	-1	-1	-1	-1	1	1	1	-1	1	-1	-1	-1
$\chi_{27}^{(5)}$	-C	-1	-C	1	-C	1	-C	1	-C	C	C	-C	-1	1	-C
$\chi_{27}^{(6)}$	C	-1	C	1	C	1	C	1	C	-C	-C	C	-1	1	C
$\chi_{27}^{(7)}$	-C	-1	-C	-1	C	-1	C	1	-C	C	-C	-C	1	-1	C
$\chi_{27}^{(8)}$	C	-1	C	-1	-C	-1	-C	1	C	-C	C	C	1	-1	-C
$\chi_{27}^{(9)}$	-B	1	-/B	/B	-/B	B	-B	/A	-/A	-A	-A	-1	A	A	-A
$\chi_{27}^{(10)}$	-/A	1	-A	A	-A	/A	-/A	/B	-/B	-B	-B	-1	B	B	-B
$\chi_{27}^{(11)}$	-A	1	-/A	/A	-/A	A	-A	B	-B	-/B	-/B	-1	/B	/B	-/B
$\chi_{27}^{(12)}$	-/B	1	-B	B	-B	/B	-/B	A	-A	-/A	-/A	-1	/A	/A	-/A
$\chi_{27}^{(13)}$	-B	1	-/B	-/B	/B	-B	B	/A	-/A	-A	A	-1	-A	-A	A
$\chi_{27}^{(14)}$	-/A	1	-A	-A	A	-/A	/A	/B	-/B	-B	B	-1	-B	-B	B
$\chi_{27}^{(15)}$	-A	1	-/A	-/A	/A	-A	A	B	-B	-/B	/B	-1	-/B	-/B	/B
$\chi_{27}^{(16)}$	-/B	1	-B	-B	B	-/B	/B	A	-A	-/A	/A	-1	-/A	-/A	/A
$\chi_{27}^{(17)}$	/B	1	B	-B	-B	-/B	-/B	A	A	/A	-/A	1	-/A	-/A	-/A
$\chi_{27}^{(18)}$	A	1	/A	-/A	-/A	-A	-A	B	B	/B	-/B	1	-/B	-/B	-/B
$\chi_{27}^{(19)}$	/A	1	A	-A	-A	-/A	-/A	/B	/B	B	-B	1	-B	-B	-B
$\chi_{27}^{(20)}$	B	1	/B	-/B	-/B	-B	-B	/A	/A	A	-A	1	-A	-A	-A
$\chi_{27}^{(21)}$	/B	1	B	B	B	/B	/B	A	A	/A	/A	1	/A	/A	/A
$\chi_{27}^{(22)}$	A	1	/A	/A	/A	A	A	B	B	/B	/B	1	/B	/B	/B
$\chi_{27}^{(23)}$	/A	1	A	A	A	/A	/A	/B	/B	B	B	1	B	B	B
$\chi_{27}^{(24)}$	B	1	/B	/B	/B	B	B	/A	/A	A	A	1	A	A	A
$\chi_{27}^{(25)}$	-/E	-1	E	B	E	/B	-/E	A	-/D	-D	-D	-C	-/A	/A	D
$\chi_{27}^{(26)}$	E	-1	-/E	/B	-/E	B	E	/A	D	/D	/D	-C	-A	A	-/D
$\chi_{27}^{(27)}$	D	-1	-/D	A	-/D	/A	D	/B	-/E	-E	-E	-C	-B	B	E
$\chi_{27}^{(28)}$	-/D	-1	D	/A	D	A	-/D	B	E	/E	/E	-C	-/B	/B	-/E
$\chi_{27}^{(29)}$	/D	-1	-D	/A	-D	A	/D	B	-E	-/E	-/E	C	-/B	/B	/E
$\chi_{27}^{(30)}$	-D	-1	/D	A	/D	/A	-D	/B	/E	E	E	C	-B	B	-E
$\chi_{27}^{(31)}$	-E	-1	/E	/B	/E	B	-E	/A	-D	-/D	-/D	C	-A	A	/D
$\chi_{27}^{(32)}$	/E	-1	-E	B	-E	/B	/E	A	/D	D	D	C	-/A	/A	-D
$\chi_{27}^{(33)}$	-/E	-1	E	-B	-E	-/B	/E	A	-/D	-D	D	-C	/A	-/A	-D
$\chi_{27}^{(34)}$	E	-1	-/E	-/B	/E	-B	-E	/A	D	/D	-/D	-C	A	-A	/D
$\chi_{27}^{(35)}$	D	-1	-/D	-A	/D	-/A	-D	/B	-/E	-E	E	-C	B	-B	-E
$\chi_{27}^{(36)}$	-/D	-1	D	-/A	-D	-A	/D	B	E	/E	-/E	-C	/B	-/B	/E
$\chi_{27}^{(37)}$	/D	-1	-D	-/A	D	-A	-/D	B	-E	-/E	/E	C	/B	-/B	-/E
$\chi_{27}^{(38)}$	-D	-1	/D	-A	-/D	-/A	D	/B	/E	E	-E	C	B	-B	E
$\chi_{27}^{(39)}$	-E	-1	/E	-/B	-/E	-B	E	/A	-D	-/D	/D	C	A	-A	-/D
$\chi_{27}^{(40)}$	/E	-1	-E	-B	E	-/B	-/E	A	/D	D	-D	C	/A	-/A	D

where $A = E(5)^4, B = E(5)^3, C = -E(4) = -ER(-1) = -i, D = E(20)^9, E = E(20)^{17}$.

$$\begin{pmatrix} 0 & 0 & -1 & 0 & 1 & 0 & -1 & 0 \\ 1 & -1 & -1 & 0 & 1 & 0 & -1 & 0 \\ 0 & -1 & -1 & 0 & 1 & 1 & -2 & 0 \\ 1 & -2 & -2 & 0 & 2 & 1 & -2 & -1 \\ 1 & -2 & -2 & 1 & 1 & 1 & -2 & -1 \\ 0 & -2 & -1 & 1 & 1 & 0 & -1 & -1 \\ 0 & -1 & -1 & 1 & 0 & 0 & 0 & -1 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & -1 & 0 & 1 & -1 & 0 & 0 & 0 \\ 0 & -2 & 0 & 1 & 0 & -1 & 0 & 1 \\ 1 & -2 & -1 & 2 & -1 & -1 & 0 & 1 \\ 1 & -4 & -1 & 3 & -1 & -2 & 1 & 1 \\ 1 & -3 & -1 & 2 & -1 & -1 & 1 & 1 \\ 1 & -2 & -1 & 1 & 0 & -1 & 1 & 0 \\ 1 & -2 & -1 & 1 & 0 & 0 & 0 & 0 \\ 1 & -1 & 0 & 0 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 0 & 1 & 0 & -1 & 0 & 1 \\ -1 & -1 & 0 & 1 & 0 & -1 & 0 & 0 \\ -1 & -1 & -1 & 2 & 0 & -2 & 0 & 1 \\ -2 & -2 & -1 & 3 & 0 & -3 & 1 & 0 \\ -2 & -1 & -1 & 2 & 0 & -2 & 1 & 0 \\ -1 & -1 & -1 & 1 & 1 & -2 & 1 & 0 \\ -1 & -1 & -1 & 1 & 1 & -1 & 0 & 0 \\ -1 & 0 & 0 & 0 & 1 & -1 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 0 & -1 & 0 & 0 & 0 & 0 & 0 & 1 \\ -1 & -1 & 0 & 0 & 1 & -1 & 0 & 1 \\ 0 & -1 & -1 & 0 & 1 & -1 & 0 & 2 \\ -1 & -2 & -1 & 0 & 2 & -2 & 1 & 2 \\ -1 & -2 & -1 & 1 & 1 & -2 & 1 & 2 \\ 0 & -2 & -1 & 1 & 1 & -2 & 1 & 1 \\ 0 & -2 & -1 & 1 & 1 & -1 & 0 & 1 \\ 0 & -1 & 0 & 0 & 1 & -1 & 0 & 1 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & -1 & 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & -1 & 0 & 0 & 0 & 0 & 0 \\ 0 & -1 & -1 & 0 & 0 & 0 & 1 & -1 \\ 0 & -1 & -1 & 1 & -1 & 0 & 1 & -1 \\ 0 & -1 & -1 & 1 & 0 & -1 & 1 & -1 \\ 0 & -1 & -1 & 1 & 0 & 0 & 0 & -1 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 1 & 1 & -1 & 0 & 1 & -1 & 0 & -1 \\ 3 & 1 & -2 & 0 & 1 & -1 & 0 & -1 \\ 3 & 1 & -2 & 0 & 2 & -2 & 0 & -2 \\ 5 & 2 & -3 & 0 & 2 & -2 & -1 & -2 \\ 4 & 2 & -2 & -1 & 2 & -1 & -1 & -2 \\ 3 & 2 & -2 & -1 & 2 & -1 & -1 & -1 \\ 2 & 2 & -1 & -1 & 1 & -1 & 0 & -1 \\ 1 & 1 & -1 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \\
\begin{pmatrix} 2 & 0 & -1 & 0 & 1 & -1 & 0 & 0 \\ 2 & 1 & -2 & 0 & 2 & -2 & 0 & 0 \\ 3 & 0 & -2 & 0 & 3 & -3 & 0 & 0 \\ 4 & 1 & -3 & 0 & 4 & -4 & -1 & 1 \\ 3 & 1 & -2 & -1 & 4 & -3 & -1 & 1 \\ 3 & 1 & -2 & -1 & 3 & -2 & -1 & 1 \\ 2 & 1 & -1 & -1 & 2 & -2 & 0 & 1 \\ 1 & 0 & -1 & 0 & 1 & -1 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 2 & 1 & -1 & -1 & 1 & 0 & 0 & -1 \\ 3 & 1 & -2 & -1 & 2 & -1 & 0 & 0 \\ 4 & 1 & -2 & -2 & 3 & -1 & 0 & -1 \\ 6 & 2 & -3 & -3 & 4 & -1 & -1 & 0 \\ 5 & 1 & -2 & -2 & 3 & -1 & -1 & 0 \\ 4 & 1 & -2 & -1 & 2 & -1 & -1 & 0 \\ 3 & 1 & -1 & -1 & 1 & -1 & 0 & 0 \\ 2 & 0 & -1 & 0 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 1 & -1 & -1 & 2 & -1 & 0 & 0 \\ 2 & 2 & -2 & -1 & 2 & -1 & 0 & -1 \\ 2 & 2 & -2 & -2 & 4 & -2 & 0 & -1 \\ 3 & 4 & -3 & -3 & 5 & -2 & -1 & -1 \\ 2 & 3 & -2 & -2 & 4 & -2 & -1 & -1 \\ 2 & 2 & -2 & -1 & 3 & -2 & -1 & 0 \\ 1 & 2 & -1 & -1 & 2 & -2 & 0 & 0 \\ 0 & 1 & -1 & 0 & 1 & -1 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} -2 & 0 & 2 & 0 & -1 & 0 & 1 & -1 \\ -2 & -1 & 3 & 0 & -2 & 1 & 1 & -1 \\ -3 & -1 & 4 & 0 & -2 & 0 & 2 & -2 \\ -4 & -1 & 6 & 0 & -4 & 1 & 2 & -2 \\ -3 & 0 & 5 & -1 & -3 & 1 & 2 & -2 \\ -3 & 0 & 4 & -1 & -2 & 1 & 1 & -1 \\ -2 & 0 & 3 & -1 & -1 & 1 & 0 & -1 \\ -1 & 0 & 1 & 0 & -1 & 1 & 0 & -1 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 2 & 0 & -1 & 0 & 1 & 0 \\ -3 & -1 & 3 & 0 & -1 & 0 & 1 & 0 \\ -3 & -2 & 4 & 0 & -1 & -1 & 2 & 0 \\ -5 & -2 & 6 & 0 & -2 & -1 & 2 & 1 \\ -4 & -1 & 5 & -1 & -1 & -1 & 2 & 1 \\ -3 & -1 & 4 & -1 & -1 & 0 & 1 & 1 \\ -2 & -1 & 3 & -1 & 0 & 0 & 0 & 1 \\ -1 & -1 & 1 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} -1 & 0 & 2 & -1 & -1 & 1 & 1 & -1 \\ -2 & -1 & 3 & -1 & -1 & 1 & 1 & 0 \\ -2 & -1 & 4 & -2 & -1 & 1 & 2 & -1 \\ -3 & -1 & 6 & -3 & -2 & 2 & 2 & 0 \\ -2 & -1 & 5 & -2 & -2 & 1 & 2 & 0 \\ -2 & -1 & 4 & -1 & -2 & 1 & 1 & 0 \\ -1 & -1 & 3 & -1 & -1 & 1 & 0 & 0 \\ 0 & -1 & 1 & 0 & -1 & 1 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} -2 & 0 & 2 & -1 & 0 & 0 & 1 & 0 \\ -3 & 0 & 3 & -1 & -1 & 1 & 1 & -1 \\ -4 & 0 & 4 & -2 & 0 & 0 & 2 & -1 \\ -6 & 1 & 6 & -3 & -1 & 1 & 2 & -1 \\ -5 & 1 & 5 & -2 & -1 & 0 & 2 & -1 \\ -4 & 0 & 4 & -1 & -1 & 0 & 1 & 0 \\ -3 & 0 & 3 & -1 & 0 & 0 & 0 & 0 \\ -2 & 0 & 1 & 0 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 0 & -2 & 1 & 1 & -1 & 0 & -1 \\ 3 & 0 & -3 & 1 & 1 & -1 & 0 & -1 \\ 3 & 0 & -4 & 2 & 1 & -1 & 0 & -2 \\ 5 & 0 & -6 & 3 & 1 & -1 & -1 & -2 \\ 4 & 0 & -5 & 2 & 1 & 0 & -1 & -2 \\ 3 & 1 & -4 & 1 & 1 & 0 & -1 & -1 \\ 2 & 1 & -3 & 1 & 0 & 0 & 0 & -1 \\ 1 & 1 & -1 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 2 & -1 & -2 & 1 & 1 & -1 & 0 & 0 \\ 2 & 0 & -3 & 1 & 2 & -2 & 0 & 0 \\ 3 & -1 & -4 & 2 & 2 & -2 & 0 & 0 \\ 4 & -1 & -6 & 3 & 3 & -3 & -1 & 1 \\ 3 & -1 & -5 & 2 & 3 & -2 & -1 & 1 \\ 3 & 0 & -4 & 1 & 2 & -1 & -1 & 1 \\ 2 & 0 & -3 & 1 & 1 & -1 & 0 & 1 \\ 1 & 0 & -1 & 0 & 1 & -1 & 0 & 1 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} -1 & -2 & 2 & 0 & 0 & 0 & 0 & 0 \\ -3 & -2 & 3 & 0 & 0 & 0 & 0 & 0 \\ -3 & -3 & 4 & 0 & 0 & 0 & 0 & 0 \\ -5 & -4 & 6 & 0 & 0 & 0 & -1 & 1 \\ -4 & -3 & 5 & -1 & 1 & 0 & -1 & 1 \\ -3 & -2 & 4 & -1 & 0 & 1 & -1 & 1 \\ -2 & -2 & 2 & 0 & 0 & 1 & -1 & 1 \\ -1 & -1 & 1 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 1 & 0 & -1 & 0 & 2 & -2 & 0 & 0 \\ 2 & 1 & -2 & 0 & 2 & -2 & 0 & -1 \\ 2 & 1 & -2 & 0 & 3 & -3 & 0 & -1 \\ 3 & 2 & -3 & 0 & 4 & -4 & -1 & -1 \\ 2 & 2 & -2 & -1 & 4 & -3 & -1 & -1 \\ 2 & 2 & -2 & -1 & 3 & -2 & -1 & 0 \\ 1 & 1 & -2 & 0 & 2 & -1 & -1 & 0 \\ 0 & 1 & -1 & 0 & 1 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 2 & 0 & -1 & 0 & 1 & -1 & 0 & -1 \\ 3 & 0 & -2 & 0 & 2 & -2 & 0 & 0 \\ 4 & 0 & -2 & 0 & 2 & -2 & 0 & -1 \\ 6 & 0 & -3 & 0 & 3 & -3 & -1 & 0 \\ 5 & 0 & -2 & -1 & 3 & -2 & -1 & 0 \\ 4 & 1 & -2 & -1 & 2 & -1 & -1 & 0 \\ 3 & 0 & -2 & 0 & 1 & 0 & -1 & 0 \\ 2 & 0 & -1 & 0 & 0 & 0 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 1 & 1 & -1 & -1 & 2 & -1 & 0 & -1 \\ 3 & 1 & -2 & -1 & 2 & -1 & 0 & -1 \\ 3 & 2 & -2 & -2 & 3 & -1 & 0 & -2 \\ 5 & 3 & -3 & -3 & 4 & -1 & -1 & -2 \\ 4 & 2 & -2 & -2 & 3 & -1 & -1 & -2 \\ 3 & 2 & -2 & -1 & 2 & -1 & -1 & -1 \\ 2 & 1 & -2 & 0 & 1 & 0 & -1 & -1 \\ 1 & 1 & -1 & 0 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 2 & 0 & -1 & -1 & 2 & -1 & 0 & 0 \\ 2 & 1 & -2 & -1 & 3 & -2 & 0 & 0 \\ 3 & 1 & -2 & -2 & 4 & -2 & 0 & 0 \\ 4 & 2 & -3 & -3 & 6 & -3 & -1 & 1 \\ 3 & 1 & -2 & -2 & 5 & -3 & -1 & 1 \\ 3 & 1 & -2 & -1 & 3 & -2 & -1 & 1 \\ 2 & 0 & -2 & 0 & 2 & -1 & -1 & 1 \\ 1 & 0 & -1 & 0 & 1 & -1 & 0 & 1 \end{pmatrix}, \begin{pmatrix} -2 & -1 & 2 & 0 & 0 & -1 & 1 & 0 \\ -3 & -1 & 3 & 0 & -1 & 0 & 1 & -1 \\ -4 & -1 & 4 & 0 & -1 & -1 & 2 & -1 \\ -6 & -1 & 6 & 0 & -2 & -1 & 2 & -1 \\ -5 & 0 & 5 & -1 & -1 & -1 & 2 & -1 \\ -4 & 0 & 4 & -1 & -1 & 0 & 1 & 0 \\ -3 & 0 & 2 & 0 & -1 & 0 & 1 & 0 \\ -2 & 0 & 1 & 0 & 0 & 0 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} -1 & -1 & 2 & 0 & -1 & 0 & 1 & -1 \\ -2 & -2 & 3 & 0 & -1 & 0 & 1 & 0 \\ -2 & -2 & 4 & 0 & -2 & 0 & 2 & -1 \\ -3 & -3 & 6 & 0 & -3 & 0 & 2 & 0 \\ -2 & -2 & 5 & -1 & -2 & 0 & 2 & 0 \\ -2 & -1 & 4 & -1 & -2 & 1 & 1 & 0 \\ -1 & -1 & 2 & 0 & -2 & 1 & 1 & 0 \\ 0 & -1 & 1 & 0 & -1 & 1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -2 & 0 & 2 & -1 & 0 & 0 & 1 & -1 \\ -2 & -1 & 3 & -1 & -1 & 1 & 1 & -1 \\ -3 & 0 & 4 & -2 & -1 & 1 & 2 & -2 \\ -4 & 0 & 6 & -3 & -2 & 2 & 2 & -2 \\ -3 & 0 & 5 & -2 & -2 & 1 & 2 & -2 \\ -3 & 0 & 4 & -1 & -2 & 1 & 1 & -1 \\ -2 & 0 & 2 & 0 & -2 & 1 & 1 & -1 \\ -1 & 0 & 1 & 0 & -1 & 1 & 0 & -1 \end{pmatrix}, \begin{pmatrix} -1 & -1 & 2 & -1 & 0 & 0 & 1 & 0 \\ -3 & -1 & 3 & -1 & 0 & 0 & 1 & 0 \\ -3 & -1 & 4 & -2 & 0 & 0 & 2 & 0 \\ -5 & -1 & 6 & -3 & 0 & 0 & 2 & 1 \\ -4 & -1 & 5 & -2 & 0 & -1 & 2 & 1 \\ -3 & -1 & 4 & -1 & -1 & 0 & 1 & 1 \\ -2 & -1 & 2 & 0 & -1 & 0 & 1 & 1 \\ -1 & -1 & 1 & 0 & 0 & 0 & 0 & 1 \end{pmatrix}, \\
\begin{pmatrix} 1 & 2 & 1 & -2 & 0 & 0 & 0 & 0 \\ 1 & 2 & 2 & -3 & 1 & -1 & 0 & 1 \\ 2 & 3 & 2 & -4 & 1 & -1 & 1 & 0 \\ 2 & 4 & 4 & -6 & 1 & -1 & 1 & 1 \\ 2 & 3 & 3 & -4 & 0 & -1 & 1 & 1 \\ 1 & 2 & 3 & -3 & 0 & -1 & 1 & 0 \\ 1 & 1 & 2 & -2 & 0 & 0 & 0 & 0 \\ 1 & 0 & 1 & -1 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 2 & 1 & -2 & 1 & -1 & 0 & 1 \\ 0 & 3 & 2 & -3 & 1 & -1 & 0 & 0 \\ 0 & 4 & 2 & -4 & 2 & -2 & 1 & 0 \\ -1 & 6 & 4 & -6 & 2 & -2 & 1 & 0 \\ -1 & 5 & 3 & -4 & 1 & -2 & 1 & 0 \\ -1 & 3 & 3 & -3 & 1 & -2 & 1 & 0 \\ -1 & 2 & 2 & -2 & 1 & -1 & 0 & 0 \\ -1 & 1 & 1 & -1 & 1 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 1 & 1 & -1 & 0 & -1 & 0 & 1 \\ 0 & 2 & 2 & -2 & 1 & -2 & 0 & 1 \\ 1 & 2 & 2 & -2 & 1 & -3 & 1 & 1 \\ 0 & 3 & 4 & -3 & 1 & -4 & 1 & 2 \\ 0 & 3 & 3 & -3 & 1 & -3 & 1 & 2 \\ 0 & 2 & 3 & -3 & 1 & -2 & 1 & 1 \\ 0 & 1 & 2 & -2 & 1 & -1 & 0 & 1 \\ 0 & 0 & 1 & -1 & 1 & -1 & 0 & 1 \end{pmatrix}, \\
\begin{pmatrix} 0 & 2 & 1 & -1 & 0 & -1 & 0 & 0 \\ 1 & 2 & 2 & -2 & 0 & -1 & 0 & 0 \\ 1 & 3 & 2 & -2 & 0 & -2 & 1 & -1 \\ 1 & 4 & 4 & -3 & -1 & -2 & 1 & -1 \\ 1 & 4 & 3 & -3 & -1 & -1 & 1 & -1 \\ 0 & 3 & 3 & -3 & 0 & -1 & 1 & -1 \\ 0 & 2 & 2 & -2 & 0 & 0 & 0 & -1 \\ 0 & 1 & 1 & -1 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 0 & 1 & 2 & -2 & 0 & 1 & -1 & 0 \\ 0 & 1 & 3 & -3 & 1 & 0 & -1 & 1 \\ 0 & 1 & 4 & -4 & 1 & 1 & -1 & 0 \\ 1 & 2 & 5 & -6 & 2 & 1 & -2 & 1 \\ 1 & 1 & 4 & -4 & 1 & 1 & -2 & 1 \\ 1 & 1 & 3 & -3 & 1 & 0 & -1 & 0 \\ 1 & 1 & 2 & -2 & 0 & 0 & 0 & 0 \\ 1 & 0 & 1 & -1 & 0 & 0 & 0 & 0 \end{pmatrix}, \begin{pmatrix} -1 & 1 & 2 & -2 & 1 & 0 & -1 & 1 \\ -1 & 2 & 3 & -3 & 1 & 0 & -1 & 0 \\ -2 & 2 & 4 & -4 & 2 & 0 & -1 & 0 \\ -2 & 4 & 5 & -6 & 3 & 0 & -2 & 0 \\ -2 & 3 & 4 & -4 & 2 & 0 & -2 & 0 \\ -1 & 2 & 3 & -3 & 2 & -1 & -1 & 0 \\ -1 & 2 & 2 & -2 & 1 & -1 & 0 & 0 \\ -1 & 1 & 1 & -1 & 1 & -1 & 0 & 0 \end{pmatrix},
\end{pmatrix}$$

$$\begin{pmatrix} 1 & 1 & 1 & -1 & 0 & -1 & 0 & 1 \\ 0 & 2 & 2 & -2 & 1 & -2 & 0 & 1 \\ 1 & 2 & 2 & -2 & 1 & -3 & 1 & 1 \\ 0 & 3 & 4 & -3 & 1 & -4 & 1 & 2 \\ 0 & 3 & 3 & -3 & 1 & -3 & 1 & 2 \\ 0 & 2 & 3 & -3 & 1 & -2 & 1 & 1 \\ 0 & 1 & 2 & -2 & 1 & -2 & 1 & 1 \\ 0 & 0 & 1 & -1 & 1 & -1 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 2 & 1 & -1 & 0 & -1 & 0 & 0 \\ 1 & 2 & 2 & -2 & 0 & -1 & 0 & 0 \\ 1 & 3 & 2 & -2 & 0 & -2 & 1 & -1 \\ 1 & 4 & 4 & -3 & -1 & -2 & 1 & -1 \\ 1 & 4 & 3 & -3 & -1 & -1 & 1 & -1 \\ 0 & 3 & 3 & -3 & 0 & -1 & 1 & -1 \\ 0 & 2 & 2 & -2 & 0 & -1 & 1 & -1 \\ 0 & 1 & 1 & -1 & 0 & 0 & 0 & -1 \end{pmatrix}, \begin{pmatrix} 1 & 1 & 1 & -1 & 0 & 0 & -1 & 0 \\ 1 & 1 & 2 & -2 & 1 & -1 & -1 & 1 \\ 2 & 1 & 2 & -2 & 1 & -1 & -1 & 0 \\ 2 & 1 & 4 & -3 & 1 & -1 & -2 & 1 \\ 2 & 1 & 3 & -3 & 1 & 0 & -2 & 1 \\ 1 & 1 & 3 & -3 & 1 & 0 & -1 & 0 \\ 1 & 0 & 2 & -2 & 1 & 0 & -1 & 0 \\ 1 & 0 & 1 & -1 & 0 & 0 & 0 & 0 \end{pmatrix}, \\
\begin{pmatrix} 0 & 1 & 1 & -1 & 1 & -1 & -1 & 1 \\ 0 & 2 & 2 & -2 & 1 & -1 & -1 & 0 \\ 0 & 2 & 2 & -2 & 2 & -2 & -1 & 0 \\ -1 & 3 & 4 & -3 & 2 & -2 & -2 & 0 \\ -1 & 3 & 3 & -3 & 2 & -1 & -2 & 0 \\ -1 & 2 & 3 & -3 & 2 & -1 & -1 & 0 \\ -1 & 1 & 2 & -2 & 2 & -1 & -1 & 0 \\ -1 & 1 & 1 & -1 & 1 & -1 & 0 & 0 \end{pmatrix}, \begin{pmatrix} 1 & 1 & 1 & -2 & 1 & 0 & -1 & 1 \\ 0 & 2 & 2 & -3 & 2 & -1 & -1 & 1 \\ 1 & 2 & 2 & -4 & 3 & -1 & -1 & 1 \\ 0 & 3 & 4 & -6 & 4 & -1 & -2 & 2 \\ 0 & 2 & 3 & -4 & 3 & -1 & -2 & 2 \\ 0 & 1 & 3 & -3 & 2 & -1 & -1 & 1 \\ 0 & 0 & 2 & -2 & 2 & -1 & -1 & 1 \\ 0 & 0 & 1 & -1 & 1 & -1 & 0 & 1 \end{pmatrix}, \begin{pmatrix} 0 & 2 & 1 & -2 & 1 & 0 & -1 & 0 \\ 1 & 2 & 2 & -3 & 1 & 0 & -1 & 0 \\ 1 & 3 & 2 & -4 & 2 & 0 & -1 & -1 \\ 1 & 4 & 4 & -6 & 2 & 1 & -2 & -1 \\ 1 & 3 & 3 & -4 & 1 & 1 & -2 & -1 \\ 0 & 2 & 3 & -3 & 1 & 0 & -1 & -1 \\ 0 & 1 & 2 & -2 & 1 & 0 & -1 & -1 \\ 0 & 1 & 1 & -1 & 0 & 0 & 0 & -1 \end{pmatrix}.$$

The character table of $G^{s_{28}}$:

	10										20																		
$\chi_{28}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
$\chi_{28}^{(2)}$	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	1	
$\chi_{28}^{(3)}$	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	1	1	1	1	-1	
$\chi_{28}^{(4)}$	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	-1	-1	-1	1	
$\chi_{28}^{(5)}$	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	
$\chi_{28}^{(6)}$	1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	
$\chi_{28}^{(7)}$	1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	
$\chi_{28}^{(8)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	
$\chi_{28}^{(9)}$	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	-1	1	-A	A	-1	1	-A	A	-1	1	-A	A	A	A	-A	-1	
$\chi_{28}^{(10)}$	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	-1	1	A	-A	-1	1	A	-A	-1	1	A	-A	-A	A	A	-1	
$\chi_{28}^{(11)}$	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	-1	1	-A	A	-1	1	-A	A	-1	1	-A	A	-A	A	A	1	
$\chi_{28}^{(12)}$	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	-1	1	A	-A	-1	1	A	-A	-1	1	A	-A	A	-A	A	1	
$\chi_{28}^{(13)}$	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	A	-A	A	-1	
$\chi_{28}^{(14)}$	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	-A	A	A	-1	
$\chi_{28}^{(15)}$	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	-A	-A	A	1	
$\chi_{28}^{(16)}$	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	A	A	-A	1	
$\chi_{28}^{(17)}$	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	-2	-2	-2	
$\chi_{28}^{(18)}$	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	2	2	2	
$\chi_{28}^{(19)}$	4	4	-4	-4	4	4	-4	-4	4	4	-4	-4	4	4	-4	-4	4	4	-4	-4	4	4	-4	-4	4	4	2	2	-2
$\chi_{28}^{(20)}$	4	4	-4	-4	4	4	-4	-4	4	4	-4	-4	4	4	-4	-4	4	4	-4	-4	4	4	-4	-4	4	4	-2	-2	2
$\chi_{28}^{(21)}$	4	4	4	4	4	4	4	4	4	4	4	4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-2	-2	-2	
$\chi_{28}^{(22)}$	4	4	4	4	4	4	4	4	4	4	4	4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	-4	2	2	2	
$\chi_{28}^{(23)}$	4	4	-4	-4	4	4	-4	-4	4	4	-4	-4	-4	-4	4	4	-4	-4	4	4	-4	-4	4	4	4	2	2	-2	
$\chi_{28}^{(24)}$	4	4	-4	-4	4	4	-4	-4	4	4	-4	-4	-4	-4	4	4	-4	-4	4	4	-4	-4	4	4	4	-2	-2	2	
$\chi_{28}^{(25)}$	4	-4	B	-B	4	-4	B	-B	4	-4	B	-B	4	-4	B	-B	4	-4	B	-B	4	-4	B	-B	4	-4	B	-B	-2
$\chi_{28}^{(26)}$	4	-4	-B	B	4	-4	-B	B	4	-4	-B	B	4	-4	-B	B	4	-4	-B	B	4	-4	-B	B	4	-4	-B	B	-2
$\chi_{28}^{(27)}$	4	-4	B	-B	4	-4	B	-B	4	-4	B	-B	4	-4	B	-B	4	-4	B	-B	4	-4	B	-B	4	-4	B	-B	2
$\chi_{28}^{(28)}$	4	-4	-B	B	4	-4	-B	B	4	-4	-B	B	4	-4	-B	B	4	-4	-B	B	4	-4	-B	B	4	-4	-B	B	2
$\chi_{28}^{(29)}$	4	-4	B	-B	4	-4	B	-B	4	-4	B	-B	-4	4	-B	B	-4	4	-B	B	-4	4	-B	B	-4	4	-B	B	-2
$\chi_{28}^{(30)}$	4	-4	-B	B	4	-4	-B	B	4	-4	-B	B	-4	4	B	-B	-4	4	B	-B	-4	4	B	-B	-4	4	B	-B	-2
$\chi_{28}^{(31)}$	4	-4	B	-B	4	-4	B	-B	4	-4	B	-B	-4	4	-B	B	-4	4	-B	B	-4	4	-B	B	-4	4	-B	B	2
$\chi_{28}^{(32)}$	4	-4	-B	B	4	-4	-B	B	4	-4	-B	B	-4	4	B	-B	-4	4	B	-B	-4	4	B	-B	-4	4	B	-B	2
$\chi_{28}^{(33)}$	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	-1	-1	-1	
$\chi_{28}^{(34)}$	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	1	1	1	
$\chi_{28}^{(35)}$	5	5	5	5	1	1	1	1	-3	-3	-3	-3	-3	-3	-3	-3	1	1	1	1	5	5	5	5	5	-3	-3	-3	
$\chi_{28}^{(36)}$	5	5	5	5	1	1	1	1	-3	-3	-3	-3	-3	-3	-3	-3	1	1	1	1	5	5	5	5	5	3	3	3	
$\chi_{28}^{(37)}$	5	5	-5	-5	5	5	-5	-5	5	5	-5	-5	5	5	-5	-5	5	5	-5	-5	5	5	-5	-5	5	5	1	1	-1
$\chi_{28}^{(38)}$	5	5	-5	-5	5	5	-5	-5	5	5	-5	-5	5	5	-5	-5	5	5	-5	-5	5	5	-5	-5	5	5	-1	-1	1
$\chi_{28}^{(39)}$	5	5	-5	-5	1	1	-1	-1	-3	-3	3	3	-3	-3	3	3	1	1	-1	-1	5	5	-5	-5	3	3	3	-3	
$\chi_{28}^{(40)}$	5	5	-5	-5	1	1	-1	-1	-3	-3	3	3	-3	-3	3	3	1	1	-1	-1	5	5	-5	-5	-3	-3	-3	3	
$\chi_{28}^{(41)}$	5	5	5	5	5	5	5	5	5	5	5	5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-1	-1	-1	
$\chi_{28}^{(42)}$	5	5	5	5	5	5	5	5	5	5	5	5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	1	1	1	
$\chi_{28}^{(43)}$	5	5	5	5	1	1	1	1	-3	-3	-3	-3	3	3	3	3	-1	-1	-1	-1	-5	-5	-5	-5	-3	-3	-3	-3	
$\chi_{28}^{(44)}$	5	5	5	5	1	1	1	1	-3	-3	-3	-3	3	3	3	3	-1	-1	-1	-1	-5	-5	-5	-5	3	3	3	3	
$\chi_{28}^{(45)}$	5	5	-5	-5	5	5	-5	-5	5	5	-5	-5	5	5	-5	-5	5	5	-5	-5	5	5	-5	-5	5	5	1	1	-1

	10																20															
$\chi_{28}^{(46)}$	5	5	-5	-5	5	5	-5	-5	5	5	-5	-5	-5	-5	5	5	-5	-5	5	5	-5	-5	5	5	-1	-1	1					
$\chi_{28}^{(47)}$	5	5	-5	-5	1	1	-1	-1	-3	-3	3	3	3	3	-3	-3	-1	-1	1	1	-5	-5	5	5	3	3	-3					
$\chi_{28}^{(48)}$	5	5	-5	-5	1	1	-1	-1	-3	-3	3	3	3	3	-3	-3	-1	-1	1	1	-5	-5	5	5	-3	-3	3					
$\chi_{28}^{(49)}$	5	-5	C	-C	5	-5	C	-C	5	-5	C	-C	5	-5	C	-C	5	-5	C	-C	5	-5	C	-C	A	-A	-1					
$\chi_{28}^{(50)}$	5	-5	-C	C	5	-5	-C	C	5	-5	-C	C	5	-5	-C	C	5	-5	-C	C	5	-5	-C	C	-A	A	-1					
$\chi_{28}^{(51)}$	5	-5	C	-C	5	-5	C	-C	5	-5	C	-C	5	-5	C	-C	5	-5	C	-C	5	-5	C	-C	-A	A	1					
$\chi_{28}^{(52)}$	5	-5	-C	C	5	-5	-C	C	5	-5	-C	C	5	-5	-C	C	5	-5	-C	C	5	-5	-C	C	A	-A	1					
$\chi_{28}^{(53)}$	5	-5	C	-C	1	-1	A	-A	-3	3	-I	I	-3	3	-I	I	1	-1	A	-A	5	-5	C	-C	I	-I	-3					
$\chi_{28}^{(54)}$	5	-5	-C	C	1	-1	-A	A	-3	3	I	-I	-3	3	I	-I	1	-1	-A	A	5	-5	-C	C	-I	I	-3					
$\chi_{28}^{(55)}$	5	-5	C	-C	1	-1	A	-A	-3	3	-I	I	-3	3	-I	I	1	-1	A	-A	5	-5	C	-C	-I	I	3					
$\chi_{28}^{(56)}$	5	-5	-C	C	1	-1	-A	A	-3	3	I	-I	-3	3	I	-I	1	-1	-A	A	5	-5	-C	C	I	-I	3					
$\chi_{28}^{(57)}$	5	-5	C	-C	5	-5	C	-C	5	-5	C	-C	-5	5	-C	C	-5	5	-C	C	-5	5	-C	C	A	-A	-1					
$\chi_{28}^{(58)}$	5	-5	-C	C	5	-5	-C	C	5	-5	-C	C	-5	5	C	-C	-5	5	C	-C	-5	5	C	-C	-A	A	-1					
$\chi_{28}^{(59)}$	5	-5	C	-C	5	-5	C	-C	5	-5	C	-C	-5	5	-C	C	-5	5	-C	C	-5	5	-C	C	-A	A	1					
$\chi_{28}^{(60)}$	5	-5	-C	C	5	-5	-C	C	5	-5	-C	C	-5	5	C	-C	-5	5	C	-C	-5	5	C	-C	A	-A	1					
$\chi_{28}^{(61)}$	5	-5	C	-C	1	-1	A	-A	-3	3	-I	I	3	-3	I	-I	-1	1	-A	A	-5	5	-C	C	I	-I	-3					
$\chi_{28}^{(62)}$	5	-5	-C	C	1	-1	-A	A	-3	3	I	-I	3	-3	-I	I	-1	1	A	-A	-5	5	C	-C	-I	I	-3					
$\chi_{28}^{(63)}$	5	-5	C	-C	1	-1	A	-A	-3	3	-I	I	3	-3	I	-I	-1	1	-A	A	-5	5	-C	C	-I	I	3					
$\chi_{28}^{(64)}$	5	-5	-C	C	1	-1	-A	A	-3	3	I	-I	3	-3	-I	I	-1	1	A	-A	-5	5	C	-C	I	-I	3					
$\chi_{28}^{(65)}$	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	.	.	.					
$\chi_{28}^{(66)}$	6	6	-6	-6	6	6	-6	-6	6	6	-6	-6	6	6	-6	-6	6	6	-6	-6	6	6	-6	-6	.	.	.					
$\chi_{28}^{(67)}$	6	6	6	6	6	6	6	6	6	6	6	6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	-6	.	.	.					
$\chi_{28}^{(68)}$	6	6	-6	-6	6	6	-6	-6	6	6	-6	-6	-6	-6	6	6	-6	-6	6	6	-6	-6	6	6	.	.	.					
$\chi_{28}^{(69)}$	6	-6	D	-D	6	-6	D	-D	6	-6	D	-D	6	-6	D	-D	6	-6	D	-D	6	-6	D	-D	.	.	.					
$\chi_{28}^{(70)}$	6	-6	-D	D	6	-6	-D	D	6	-6	-D	D	6	-6	-D	D	6	-6	-D	D	6	-6	-D	D	.	.	.					
$\chi_{28}^{(71)}$	6	-6	D	-D	6	-6	D	-D	6	-6	D	-D	-6	6	-D	D	-6	6	-D	D	-6	6	-D	D	.	.	.					
$\chi_{28}^{(72)}$	6	-6	-D	D	6	-6	-D	D	6	-6	-D	D	-6	6	D	-D	-6	6	D	-D	-6	6	D	-D	.	.	.					
$\chi_{28}^{(73)}$	10	10	10	10	-2	-2	-2	-2	2	2	2	2	2	2	2	2	-2	-2	-2	-2	10	10	10	10	-2	-2	-2					
$\chi_{28}^{(74)}$	10	10	10	10	-2	-2	-2	-2	2	2	2	2	2	2	2	2	-2	-2	-2	-2	10	10	10	10	-4	-4	-4					
$\chi_{28}^{(75)}$	10	10	10	10	-2	-2	-2	-2	2	2	2	2	2	2	2	2	-2	-2	-2	-2	10	10	10	10	2	2	2					
$\chi_{28}^{(76)}$	10	10	10	10	-2	-2	-2	-2	2	2	2	2	2	2	2	2	-2	-2	-2	-2	10	10	10	10	4	4	4					
$\chi_{28}^{(77)}$	10	10	10	10	2	2	2	2	-6	-6	-6	-6	-6	-6	-6	-6	2	2	2	2	10	10	10	10	.	.	.					
$\chi_{28}^{(78)}$	10	10	-10	-10	-2	-2	2	2	2	2	-2	-2	2	2	-2	-2	-2	-2	2	2	10	10	-10	-10	2	2	-2					
$\chi_{28}^{(79)}$	10	10	-10	-10	-2	-2	2	2	2	2	-2	-2	2	2	-2	-2	-2	-2	2	2	10	10	-10	-10	4	4	-4					
$\chi_{28}^{(80)}$	10	10	-10	-10	-2	-2	2	2	2	2	-2	-2	2	2	-2	-2	-2	-2	2	2	10	10	-10	-10	-2	-2	2					
$\chi_{28}^{(81)}$	10	10	-10	-10	-2	-2	2	2	2	2	-2	-2	2	2	-2	-2	-2	-2	2	2	10	10	-10	-10	-4	-4	4					
$\chi_{28}^{(82)}$	10	10	-10	-10	2	2	-2	-2	-6	-6	6	6	-6	-6	6	6	2	2	-2	-2	10	10	-10	-10	.	.	.					
$\chi_{28}^{(83)}$	10	10	10	10	2	2	2	2	-6	-6	-6	-6	6	6	6	6	-2	-2	-2	-2	-10	-10	-10	-10	.	.	.					
$\chi_{28}^{(84)}$	10	10	10	10	-2	-2	-2	-2	2	2	2	2	-2	-2	-2	-2	2	2	2	2	-10	-10	-10	-10	-2	-2	-2					
$\chi_{28}^{(85)}$	10	10	10	10	-2	-2	-2	-2	2	2	2	2	-2	-2	-2	-2	2	2	2	2	-10	-10	-10	-10	-4	-4	-4					
$\chi_{28}^{(86)}$	10	10	10	10	-2	-2	-2	-2	2	2	2	2	-2	-2	-2	-2	2	2	2	2	-10	-10	-10	-10	2	2	2					
$\chi_{28}^{(87)}$	10	10	10	10	-2	-2	-2	-2	2	2	2	2	-2	-2	-2	-2	2	2	2	2	-10	-10	-10	-10	4	4	4					
$\chi_{28}^{(88)}$	10	10	-10	-10	2	2	-2	-2	-6	-6	6	6	6	6	-6	-6	-2	-2	2	2	-10	-10	10	10	.	.	.					
$\chi_{28}^{(89)}$	10	10	-10	-10	-2	-2	2	2	2	2	-2	-2	-2	-2	2	2	2	2	-2	-2	-10	-10	10	10	2	2	-2					
$\chi_{28}^{(90)}$	10	10	-10	-10	-2	-2	2	2	2	2	-2	-2	-2	-2	2	2	2	2	-2	-2	-10	-10	10	10	4	4	-4					

	10										20																
$\chi_{28}^{(91)}$	10	10	-10	-10	-2	-2	2	2	2	2	-2	-2	-2	-2	2	2	2	2	-2	-2	-10	-10	10	10	-2	-2	2
$\chi_{28}^{(92)}$	10	10	-10	-10	-2	-2	2	2	2	2	-2	-2	-2	-2	2	2	2	2	-2	-2	-10	-10	10	10	-4	-4	4
$\chi_{28}^{(93)}$	10	-10	E	-E	-2	2	H	-H	2	-2	-H	H	2	-2	-H	H	-2	2	H	-H	10	-10	E	-E	-H	H	-2
$\chi_{28}^{(94)}$	10	-10	-E	E	-2	2	-H	H	2	-2	H	-H	2	-2	H	-H	-2	2	-H	H	10	-10	-E	E	H	-H	-2
$\chi_{28}^{(95)}$	10	-10	E	-E	-2	2	H	-H	2	-2	-H	H	2	-2	-H	H	-2	2	H	-H	10	-10	E	-E	B	-B	-4
$\chi_{28}^{(96)}$	10	-10	-E	E	-2	2	-H	H	2	-2	H	-H	2	-2	H	-H	-2	2	-H	H	10	-10	-E	E	-B	B	-4
$\chi_{28}^{(97)}$	10	-10	E	-E	-2	2	H	-H	2	-2	-H	H	2	-2	-H	H	-2	2	H	-H	10	-10	E	-E	H	-H	2
$\chi_{28}^{(98)}$	10	-10	-E	E	-2	2	-H	H	2	-2	H	-H	2	-2	H	-H	-2	2	-H	H	10	-10	-E	E	-H	H	2
$\chi_{28}^{(99)}$	10	-10	E	-E	-2	2	H	-H	2	-2	-H	H	2	-2	-H	H	-2	2	H	-H	10	-10	E	-E	-B	B	4
$\chi_{28}^{(100)}$	10	-10	-E	E	-2	2	-H	H	2	-2	H	-H	2	-2	H	-H	-2	2	-H	H	10	-10	-E	E	B	-B	4
$\chi_{28}^{(101)}$	10	-10	E	-E	2	-2	-H	H	-6	6	-D	D	-6	6	-D	D	2	-2	-H	H	10	-10	E	-E	.	.	.
$\chi_{28}^{(102)}$	10	-10	-E	E	2	-2	H	-H	-6	6	D	-D	-6	6	D	-D	2	-2	H	-H	10	-10	-E	E	.	.	.
$\chi_{28}^{(103)}$	10	-10	E	-E	2	-2	-H	H	-6	6	-D	D	6	-6	D	-D	-2	2	H	-H	-10	10	-E	E	.	.	.
$\chi_{28}^{(104)}$	10	-10	-E	E	2	-2	H	-H	-6	6	D	-D	6	-6	-D	D	-2	2	-H	H	-10	10	E	-E	.	.	.
$\chi_{28}^{(105)}$	10	-10	E	-E	-2	2	H	-H	2	-2	-H	H	-2	2	H	-H	2	-2	-H	H	-10	10	-E	E	-H	H	-2
$\chi_{28}^{(106)}$	10	-10	-E	E	-2	2	-H	H	2	-2	H	-H	-2	2	-H	H	2	-2	H	-H	-10	10	E	-E	H	-H	-2
$\chi_{28}^{(107)}$	10	-10	E	-E	-2	2	H	-H	2	-2	-H	H	-2	2	H	-H	2	-2	-H	H	-10	10	-E	E	B	-B	-4
$\chi_{28}^{(108)}$	10	-10	-E	E	-2	2	-H	H	2	-2	H	-H	-2	2	-H	H	2	-2	H	-H	-10	10	E	-E	-B	B	-4
$\chi_{28}^{(109)}$	10	-10	E	-E	-2	2	H	-H	2	-2	-H	H	-2	2	H	-H	2	-2	-H	H	-10	10	-E	E	H	-H	2
$\chi_{28}^{(110)}$	10	-10	-E	E	-2	2	-H	H	2	-2	H	-H	-2	2	-H	H	2	-2	H	-H	-10	10	E	-E	-H	H	2
$\chi_{28}^{(111)}$	10	-10	E	-E	-2	2	H	-H	2	-2	-H	H	-2	2	H	-H	2	-2	-H	H	-10	10	-E	E	-B	B	4
$\chi_{28}^{(112)}$	10	-10	-E	E	-2	2	-H	H	2	-2	H	-H	-2	2	-H	H	2	-2	H	-H	-10	10	E	-E	B	-B	4
$\chi_{28}^{(113)}$	15	15	15	15	3	3	3	3	-9	-9	-9	-9	-9	-9	-9	-9	3	3	3	3	15	15	15	15	3	3	3
$\chi_{28}^{(114)}$	15	15	15	15	3	3	3	3	-9	-9	-9	-9	-9	-9	-9	-9	3	3	3	3	15	15	15	15	-3	-3	-3
$\chi_{28}^{(115)}$	15	15	-15	-15	3	3	-3	-3	-9	-9	9	9	-9	-9	9	9	3	3	-3	-3	15	15	-15	-15	-3	-3	3
$\chi_{28}^{(116)}$	15	15	-15	-15	3	3	-3	-3	-9	-9	9	9	-9	-9	9	9	3	3	-3	-3	15	15	-15	-15	3	3	-3
$\chi_{28}^{(117)}$	15	15	15	15	3	3	3	3	-9	-9	-9	-9	9	9	9	9	-3	-3	-3	-3	-15	-15	-15	-15	3	3	3
$\chi_{28}^{(118)}$	15	15	15	15	3	3	3	3	-9	-9	-9	-9	9	9	9	9	-3	-3	-3	-3	-15	-15	-15	-15	-3	-3	-3
$\chi_{28}^{(119)}$	15	15	-15	-15	3	3	-3	-3	-9	-9	9	9	9	9	-9	-9	-3	-3	3	3	-15	-15	15	15	-3	-3	3
$\chi_{28}^{(120)}$	15	15	-15	-15	3	3	-3	-3	-9	-9	9	9	9	9	-9	-9	-3	-3	3	3	-15	-15	15	15	3	3	-3
$\chi_{28}^{(121)}$	15	-15	F	-F	3	-3	I	-I	-9	9	J	-J	-9	9	J	-J	3	-3	I	-I	15	-15	F	-F	-I	I	3
$\chi_{28}^{(122)}$	15	-15	-F	F	3	-3	-I	I	-9	9	-J	J	-9	9	-J	J	3	-3	-I	I	15	-15	-F	F	I	-I	3
$\chi_{28}^{(123)}$	15	-15	F	-F	3	-3	I	-I	-9	9	J	-J	-9	9	J	-J	3	-3	I	-I	15	-15	F	-F	I	-I	-3
$\chi_{28}^{(124)}$	15	-15	-F	F	3	-3	-I	I	-9	9	-J	J	-9	9	-J	J	3	-3	-I	I	15	-15	-F	F	-I	I	-3
$\chi_{28}^{(125)}$	15	-15	F	-F	3	-3	I	-I	-9	9	J	-J	9	-9	-J	J	-3	3	-I	I	-15	15	-F	F	-I	I	3
$\chi_{28}^{(126)}$	15	-15	-F	F	3	-3	-I	I	-9	9	-J	J	9	-9	J	-J	-3	3	I	-I	-15	15	F	-F	I	-I	3
$\chi_{28}^{(127)}$	15	-15	F	-F	3	-3	I	-I	-9	9	J	-J	9	-9	-J	J	-3	3	-I	I	-15	15	-F	F	I	-I	-3
$\chi_{28}^{(128)}$	15	-15	-F	F	3	-3	-I	I	-9	9	-J	J	9	-9	J	-J	-3	3	I	-I	-15	15	F	-F	-I	I	-3
$\chi_{28}^{(129)}$	20	20	20	20	-4	-4	-4	-4	4	4	4	4	4	4	4	4	-4	-4	-4	-4	20	20	20	20	2	2	2
$\chi_{28}^{(130)}$	20	20	20	20	-4	-4	-4	-4	4	4	4	4	4	4	4	4	-4	-4	-4	-4	20	20	20	20	-2	-2	-2
$\chi_{28}^{(131)}$	20	20	-20	-20	-4	-4	4	4	4	4	-4	-4	4	4	-4	-4	-4	-4	4	4	20	20	-20	-20	-2	-2	2
$\chi_{28}^{(132)}$	20	20	-20	-20	-4	-4	4	4	4	4	-4	-4	4	4	-4	-4	-4	-4	4	4	20	20	-20	-20	2	2	-2
$\chi_{28}^{(133)}$	20	20	20	20	-4	-4	-4	-4	4	4	4	4	-4	-4	-4	-4	4	4	4	4	-20	-20	-20	-20	2	2	2
$\chi_{28}^{(134)}$	20	20	20	20	-4	-4	-4	-4	4	4	4	4	-4	-4	-4	-4	4	4	4	4	-20	-20	-20	-20	-2	-2	-2
$\chi_{28}^{(135)}$	20	20	-20	-20	-4	-4	4	4	4	4	-4	-4	-4	-4	4	4	4	4	-4	-4	-20	-20	20	20	-2	-2	2

	10														20																											
$\chi_{28}^{(136)}$	20	20	-20	-20	-4	-4	4	4	4	4	-4	-4	-4	-4	4	4	4	4	-4	-4	-20	-20	20	20	2	2	-2															
$\chi_{28}^{(137)}$	20	-20	G	-G	-4	4	-B	B	4	-4	B	-B	4	-4	B	-B	-4	4	-B	B	20	-20	G	-G	H	-H	2															
$\chi_{28}^{(138)}$	20	-20	-G	G	-4	4	B	-B	4	-4	-B	B	4	-4	-B	B	-4	4	B	-B	20	-20	-G	G	-H	H	2															
$\chi_{28}^{(139)}$	20	-20	G	-G	-4	4	-B	B	4	-4	B	-B	4	-4	B	-B	-4	4	-B	B	20	-20	G	-G	-H	H	-2															
$\chi_{28}^{(140)}$	20	-20	-G	G	-4	4	B	-B	4	-4	-B	B	4	-4	-B	B	-4	4	B	-B	20	-20	-G	G	H	-H	-2															
$\chi_{28}^{(141)}$	20	-20	G	-G	-4	4	-B	B	4	-4	B	-B	-4	4	-B	B	4	-4	B	-B	-20	20	-G	G	H	-H	2															
$\chi_{28}^{(142)}$	20	-20	-G	G	-4	4	B	-B	4	-4	-B	B	-4	4	B	-B	4	-4	-B	B	-20	20	G	-G	-H	H	2															
$\chi_{28}^{(143)}$	20	-20	G	-G	-4	4	-B	B	4	-4	B	-B	-4	4	-B	B	4	-4	B	-B	-20	20	-G	G	-H	H	-2															
$\chi_{28}^{(144)}$	20	-20	-G	G	-4	4	B	-B	4	-4	-B	B	-4	4	B	-B	4	-4	-B	B	-20	20	G	-G	H	-H	-2															
	30							40							50																											
$\chi_{28}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1																
$\chi_{28}^{(2)}$	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1															
$\chi_{28}^{(3)}$	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1															
$\chi_{28}^{(4)}$	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1															
$\chi_{28}^{(5)}$	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1															
$\chi_{28}^{(6)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	1	1	1	1	1															
$\chi_{28}^{(7)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1															
$\chi_{28}^{(8)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1															
$\chi_{28}^{(9)}$	1	A	-A	-1	1	A	-A	-1	1	A	-A	-1	1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A															
$\chi_{28}^{(10)}$	1	-A	A	-1	1	-A	A	-1	1	-A	A	-1	1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A															
$\chi_{28}^{(11)}$	-1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	A	-A	-1	1	A	-A	-1	1	A	-A	-1	1	A	-A															
$\chi_{28}^{(12)}$	-1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	-A	A	-1	1	-A	A	-1	1	-A	A	-1	1	-A	A															
$\chi_{28}^{(13)}$	1	A	-A	-1	1	A	-A	-1	1	A	-A	-1	1	A	-A	-1	1	A	-A	-1	1	A	-A	-1	1	A	-A															
$\chi_{28}^{(14)}$	1	-A	A	-1	1	-A	A	-1	1	-A	A	-1	1	-A	A	-1	1	-A	A	-1	1	-A	A	-1	1	-A	A															
$\chi_{28}^{(15)}$	-1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A															
$\chi_{28}^{(16)}$	-1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A															
$\chi_{28}^{(17)}$	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2															
$\chi_{28}^{(18)}$	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2															
$\chi_{28}^{(19)}$	-2	2	2	-2	-2	2	2	-2	-2	2	2	-2	-2	2	2	-2	-2	2	2	-2	-2	2	2	-2	-2	2	2															
$\chi_{28}^{(20)}$	2	-2	-2	2	2	-2	-2	2	2	-2	-2	2	2	-2	-2	2	2	-2	-2	2	2	-2	-2	2	2	-2	-2															
$\chi_{28}^{(21)}$	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	2	2	2	2	2	2	2	2	2	2	2	2	2	2															
$\chi_{28}^{(22)}$	2	2	2	2	2	2	2	2	2	2	2	2	2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2															
$\chi_{28}^{(23)}$	-2	2	2	-2	-2	2	2	-2	-2	2	2	-2	-2	-2	-2	2	2	-2	-2	2	2	-2	-2	2	2	-2	-2															
$\chi_{28}^{(24)}$	2	-2	-2	2	2	-2	-2	2	2	-2	-2	2	2	2	2	-2	-2	2	2	-2	-2	2	2	-2	-2	2	2															
$\chi_{28}^{(25)}$	2	-H	H	-2	2	-H	H	-2	2	-H	H	-2	2	-H	H	-2	2	-H	H	-2	2	-H	H	-2	2	-H	H															
$\chi_{28}^{(26)}$	2	H	-H	-2	2	H	-H	-2	2	H	-H	-2	2	H	-H	-2	2	H	-H	-2	2	H	-H	-2	2	H	-H															
$\chi_{28}^{(27)}$	-2	H	-H	2	-2	H	-H	2	-2	H	-H	2	-2	H	-H	2	-2	H	-H	2	-2	H	-H	2	-2	H	-H															
$\chi_{28}^{(28)}$	-2	-H	H	2	-2	-H	H	2	-2	-H	H	2	-2	-H	H	2	-2	-H	H	2	-2	-H	H	2	-2	-H	H															
$\chi_{28}^{(29)}$	2	-H	H	-2	2	-H	H	-2	2	-H	H	-2	2	H	-H	2	-2	H	-H	2	-2	H	-H	2	-2	H	-H															
$\chi_{28}^{(30)}$	2	H	-H	-2	2	H	-H	-2	2	H	-H	-2	2	-H	H	2	-2	-H	H	2	-2	-H	H	2	-2	-H	H															
$\chi_{28}^{(31)}$	-2	H	-H	2	-2	H	-H	2	-2	H	-H	2	-2	-H	H	-2	2	-H	H	-2	2	-H	H	-2	2	-H	H															
$\chi_{28}^{(32)}$	-2	-H	H	2	-2	-H	H	2	-2	-H	H	2	-2	H	-H	-2	2	H	-H	-2	2	H	-H	-2	2	H	-H															
$\chi_{28}^{(33)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1															
$\chi_{28}^{(34)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1															
$\chi_{28}^{(35)}$	-3	-1	-1	-1	-1	1	1	1	1	3	3	3	3	3	3	3	3	3	1	1	1	1	-1	-1	-1	-1	-3	-3														

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$\chi_{28}^{(36)}$	3	1	1	1	1	-1	-1	-1	-1	-3	-3	-3	-3	-3	-3	-3	-1	-1	-1	-1	1	1	1	1	3	3				
$\chi_{28}^{(37)}$	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1			
$\chi_{28}^{(38)}$	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1			
$\chi_{28}^{(39)}$	-3	1	1	-1	-1	-1	-1	1	1	-3	-3	3	3	-3	-3	3	3	-1	-1	1	1	1	1	-1	-1	3	3			
$\chi_{28}^{(40)}$	3	-1	-1	1	1	1	1	-1	-1	3	3	-3	-3	3	3	-3	-3	1	1	-1	-1	-1	-1	1	1	-3	-3			
$\chi_{28}^{(41)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
$\chi_{28}^{(42)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1			
$\chi_{28}^{(43)}$	-3	-1	-1	-1	-1	1	1	1	1	3	3	3	3	-3	-3	-3	-3	-1	-1	-1	-1	1	1	1	1	3	3			
$\chi_{28}^{(44)}$	3	1	1	1	1	-1	-1	-1	-1	-3	-3	-3	-3	3	3	3	3	1	1	1	1	-1	-1	-1	-1	-3	-3			
$\chi_{28}^{(45)}$	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1			
$\chi_{28}^{(46)}$	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1			
$\chi_{28}^{(47)}$	-3	1	1	-1	-1	-1	-1	1	1	-3	-3	3	3	3	3	-3	-3	1	1	-1	-1	-1	-1	1	1	-3	-3			
$\chi_{28}^{(48)}$	3	-1	-1	1	1	1	1	-1	-1	3	3	-3	-3	-3	-3	3	3	-1	-1	1	1	1	1	-1	-1	3	3			
$\chi_{28}^{(49)}$	1	A	-A	-1	1	A	-A	-1	1	A	-A	-1	1	A	-A	-1	1	A	-A	-1	1	A	-A	-1	1	A	-A			
$\chi_{28}^{(50)}$	1	-A	A	-1	1	-A	A	-1	1	-A	A	-1	1	-A	A	-1	1	-A	A	-1	1	-A	A	-1	1	-A	A			
$\chi_{28}^{(51)}$	-1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A			
$\chi_{28}^{(52)}$	-1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A			
$\chi_{28}^{(53)}$	3	A	-A	-1	1	-A	A	1	-1	-I	I	3	-3	-I	I	3	-3	-A	A	1	-1	A	-A	-1	1	-I	-I			
$\chi_{28}^{(54)}$	3	-A	A	-1	1	A	-A	1	-1	I	-I	3	-3	I	-I	3	-3	A	-A	1	-1	-A	A	-1	1	-I	I			
$\chi_{28}^{(55)}$	-3	-A	A	1	-1	A	-A	-1	1	I	-I	-3	3	I	-I	-3	3	A	-A	-1	1	-A	A	1	-1	-I	I			
$\chi_{28}^{(56)}$	-3	A	-A	1	-1	-A	A	-1	1	-I	I	-3	3	-I	I	-3	3	-A	A	-1	1	A	-A	1	-1	-I	-I			
$\chi_{28}^{(57)}$	1	A	-A	-1	1	A	-A	-1	1	A	-A	-1	1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A			
$\chi_{28}^{(58)}$	1	-A	A	-1	1	-A	A	-1	1	-A	A	-1	1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A			
$\chi_{28}^{(59)}$	-1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	A	-A	-1	1	A	-A	-1	1	A	-A	-1	1	A	-A			
$\chi_{28}^{(60)}$	-1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	-A	A	-1	1	-A	A	-1	1	-A	A	-1	1	-A	A			
$\chi_{28}^{(61)}$	3	A	-A	-1	1	-A	A	1	-1	-I	I	3	-3	I	-I	-3	3	A	-A	-1	1	-A	A	1	-1	-I	I			
$\chi_{28}^{(62)}$	3	-A	A	-1	1	A	-A	1	-1	I	-I	3	-3	-I	I	-3	3	-A	A	-1	1	A	-A	1	-1	-I	-I			
$\chi_{28}^{(63)}$	-3	-A	A	1	-1	A	-A	-1	1	I	-I	-3	3	-I	I	3	-3	-A	A	1	-1	A	-A	-1	1	-I	-I			
$\chi_{28}^{(64)}$	-3	A	-A	1	-1	-A	A	-1	1	-I	I	-3	3	I	-I	3	-3	A	-A	1	-1	-A	A	-1	1	-I	-I			
$\chi_{28}^{(65)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(66)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(67)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(68)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(69)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(70)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(71)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(72)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(73)}$	-2	.	.	.	.	2	2	2	2	-4	-4	-4	-4	-4	-4	-4	-4	2	2	2	2	.	.	.	.	-2	-2
$\chi_{28}^{(74)}$	-4	2	2	2	2	.	.	.	.	-2	-2	-2	-2	-2	-2	-2	-2	.	.	.	.	2	2	2	2	-4	-4
$\chi_{28}^{(75)}$	2	.	.	.	.	-2	-2	-2	-2	4	4	4	4	4	4	4	4	-2	-2	-2	-2	.	.	.	.	2	2
$\chi_{28}^{(76)}$	4	-2	-2	-2	-2	.	.	.	.	2	2	2	2	2	2	2	2	.	.	.	.	-2	-2	-2	-2	4	4
$\chi_{28}^{(77)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(78)}$	-2	-2	-2	2	2	4	4	-4	-4	4	4	-4	-4	-2	-2	2	2	2	2			
$\chi_{28}^{(79)}$	-4	-2	-2	2	2	2	2	-2	-2	2	2	-2	-2	-2	-2	2	2	4	4			
$\chi_{28}^{(80)}$	2	2	2	-2	-2	-4	-4	4	4	-4	-4	4	4	2	2	-2	-2	-2	-2			

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$\chi_{28}^{(81)}$	4	2	2	-2	-2	-2	-2	2	2	-2	-2	2	2	2	2	-2	-2	-4	-4
$\chi_{28}^{(82)}$
$\chi_{28}^{(83)}$
$\chi_{28}^{(84)}$	-2	2	2	2	2	-4	-4	-4	-4	4	4	4	4	-2	-2	-2	-2	2	2
$\chi_{28}^{(85)}$	-4	2	2	2	2	-2	-2	-2	-2	2	2	2	2	-2	-2	-2	-2	4	4
$\chi_{28}^{(86)}$	2	.	.	.	.	-2	-2	-2	-2	4	4	4	4	-4	-4	-4	-4	2	2	2	2	.	.	.	.	-2	-2
$\chi_{28}^{(87)}$	4	-2	-2	-2	-2	.	.	.	.	2	2	2	2	-2	-2	-2	-2	.	.	.	.	2	2	2	2	-4	-4
$\chi_{28}^{(88)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(89)}$	-2	.	.	.	.	-2	-2	2	2	4	4	-4	-4	-4	-4	4	4	2	2	-2	-2	.	.	.	.	-2	-2
$\chi_{28}^{(90)}$	-4	-2	-2	2	2	.	.	.	.	2	2	-2	-2	-2	-2	2	2	.	.	.	.	2	2	-2	-2	-4	-4
$\chi_{28}^{(91)}$	2	.	.	.	.	2	2	-2	-2	-4	-4	4	4	4	4	-4	-4	-2	-2	2	2	.	.	.	.	2	2
$\chi_{28}^{(92)}$	4	2	2	-2	-2	.	.	.	.	-2	-2	2	2	2	2	-2	-2	.	.	.	.	-2	-2	2	2	4	4
$\chi_{28}^{(93)}$	2	.	.	.	.	H	-H	2	-2	B	-B	-4	4	B	-B	-4	4	H	-H	2	-2	.	.	.	.	-H	H
$\chi_{28}^{(94)}$	2	.	.	.	.	-H	H	2	-2	-B	B	-4	4	-B	B	-4	4	-H	H	2	-2	.	.	.	.	H	-H
$\chi_{28}^{(95)}$	4	H	-H	2	-2	.	.	.	.	-H	H	-2	2	-H	H	-2	2	.	.	.	.	H	-H	2	-2	B	-B
$\chi_{28}^{(96)}$	4	-H	H	2	-2	.	.	.	.	H	-H	-2	2	H	-H	-2	2	.	.	.	.	-H	H	2	-2	-B	B
$\chi_{28}^{(97)}$	-2	.	.	.	.	-H	H	-2	2	-B	B	4	-4	-B	B	4	-4	-H	H	-2	2	.	.	.	.	H	-H
$\chi_{28}^{(98)}$	-2	.	.	.	.	H	-H	-2	2	B	-B	4	-4	B	-B	4	-4	H	-H	-2	2	.	.	.	.	-H	H
$\chi_{28}^{(99)}$	-4	-H	H	-2	2	.	.	.	.	H	-H	2	-2	H	-H	2	-2	.	.	.	.	-H	H	-2	2	-B	B
$\chi_{28}^{(100)}$	-4	H	-H	-2	2	.	.	.	.	-H	H	2	-2	-H	H	2	-2	.	.	.	.	H	-H	-2	2	B	-B
$\chi_{28}^{(101)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(102)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(103)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(104)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(105)}$	2	.	.	.	.	H	-H	2	-2	B	-B	-4	4	-B	B	4	-4	-H	H	-2	2	.	.	.	.	H	-H
$\chi_{28}^{(106)}$	2	.	.	.	.	-H	H	2	-2	-B	B	-4	4	B	-B	4	-4	H	-H	-2	2	.	.	.	.	-H	H
$\chi_{28}^{(107)}$	4	H	-H	2	-2	.	.	.	.	-H	H	-2	2	H	-H	2	-2	.	.	.	.	-H	H	-2	2	-B	B
$\chi_{28}^{(108)}$	4	-H	H	2	-2	.	.	.	.	H	-H	-2	2	-H	H	2	-2	.	.	.	.	H	-H	-2	2	B	-B
$\chi_{28}^{(109)}$	-2	.	.	.	.	-H	H	-2	2	-B	B	4	-4	B	-B	-4	4	H	-H	2	-2	.	.	.	.	-H	H
$\chi_{28}^{(110)}$	-2	.	.	.	.	H	-H	-2	2	B	-B	4	-4	-B	B	-4	4	-H	H	2	-2	.	.	.	.	H	-H
$\chi_{28}^{(111)}$	-4	-H	H	-2	2	.	.	.	.	H	-H	2	-2	-H	H	-2	2	.	.	.	.	H	-H	2	-2	B	-B
$\chi_{28}^{(112)}$	-4	H	-H	-2	2	.	.	.	.	-H	H	2	-2	H	-H	-2	2	.	.	.	.	-H	H	2	-2	-B	B
$\chi_{28}^{(113)}$	3	1	1	1	1	-1	-1	-1	-1	-3	-3	-3	-3	-3	-3	-3	-3	-1	-1	-1	-1	1	1	1	1	3	3
$\chi_{28}^{(114)}$	-3	-1	-1	-1	-1	1	1	1	1	3	3	3	3	3	3	3	3	1	1	1	1	-1	-1	-1	-1	-3	-3
$\chi_{28}^{(115)}$	3	-1	-1	1	1	1	1	-1	-1	3	3	-3	-3	3	3	-3	-3	1	1	-1	-1	-1	-1	1	1	-3	-3
$\chi_{28}^{(116)}$	-3	1	1	-1	-1	-1	-1	1	1	-3	-3	3	3	-3	-3	3	3	-1	-1	1	1	1	1	-1	-1	3	3
$\chi_{28}^{(117)}$	3	1	1	1	1	-1	-1	-1	-1	-3	-3	-3	-3	3	3	3	3	1	1	1	1	-1	-1	-1	-1	-3	-3
$\chi_{28}^{(118)}$	-3	-1	-1	-1	-1	1	1	1	1	3	3	3	3	-3	-3	-3	-3	-1	-1	-1	-1	1	1	1	1	3	3
$\chi_{28}^{(119)}$	3	-1	-1	1	1	1	1	-1	-1	3	3	-3	-3	-3	-3	3	3	-1	-1	1	1	1	1	-1	-1	3	3
$\chi_{28}^{(120)}$	-3	1	1	-1	-1	-1	-1	1	1	-3	-3	3	3	3	3	-3	-3	1	1	-1	-1	-1	-1	1	1	-3	-3
$\chi_{28}^{(121)}$	-3	-A	A	1	-1	A	-A	-1	1	I	-I	-3	3	I	-I	-3	3	A	-A	-1	1	-A	A	1	-1	-I	I
$\chi_{28}^{(122)}$	-3	A	-A	1	-1	-A	A	-1	1	-I	I	-3	3	-I	I	-3	3	-A	A	-1	1	A	-A	1	-1	I	-I
$\chi_{28}^{(123)}$	3	A	-A	-1	1	-A	A	1	-1	-I	I	3	-3	-I	I	3	-3	-A	A	1	-1	A	-A	-1	1	I	-I
$\chi_{28}^{(124)}$	3	-A	A	-1	1	A	-A	1	-1	I	-I	3	-3	I	-I	3	-3	A	-A	1	-1	-A	A	-1	1	-I	I
$\chi_{28}^{(125)}$	-3	-A	A	1	-1	A	-A	-1	1	I	-I	-3	3	-I	I	3	-3	-A	A	1	-1	A	-A	-1	1	I	-I

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$\chi_{28}^{(126)}$	-3	A	-A	1	-1	-A	A	-1	1	-I	I	-3	3	I	-I	3	-3	A	-A	1	-1	-A	A	-1	1	-I	I			
$\chi_{28}^{(127)}$	3	A	-A	-1	1	-A	A	1	-1	-I	I	3	-3	I	-I	-3	3	A	-A	-1	1	-A	A	1	-1	-I	I			
$\chi_{28}^{(128)}$	3	-A	A	-1	1	A	-A	1	-1	I	-I	3	-3	-I	I	-3	3	-A	A	-1	1	A	-A	1	-1	I	-I			
$\chi_{28}^{(129)}$	2	-2	-2	-2	-2	2	2	2	2	-2	-2	-2	-2	-2	-2	-2	-2	2	2	2	2	-2	-2	-2	-2	2	2			
$\chi_{28}^{(130)}$	-2	2	2	2	2	-2	-2	-2	-2	2	2	2	2	2	2	2	2	-2	-2	-2	-2	2	2	2	2	-2	-2			
$\chi_{28}^{(131)}$	2	2	2	-2	-2	-2	-2	2	2	2	2	-2	-2	2	2	-2	-2	-2	-2	2	2	2	2	2	-2	-2	-2			
$\chi_{28}^{(132)}$	-2	-2	-2	2	2	2	2	-2	-2	-2	-2	2	2	-2	-2	2	2	2	2	-2	-2	-2	-2	2	2	2	2			
$\chi_{28}^{(133)}$	2	-2	-2	-2	-2	2	2	2	2	-2	-2	-2	-2	2	2	2	2	-2	-2	-2	-2	2	2	2	2	-2	-2			
$\chi_{28}^{(134)}$	-2	2	2	2	2	-2	-2	-2	-2	2	2	2	2	-2	-2	-2	-2	2	2	2	2	-2	-2	-2	-2	2	2			
$\chi_{28}^{(135)}$	2	2	2	-2	-2	-2	-2	2	2	2	2	-2	-2	-2	-2	2	2	2	2	-2	-2	-2	-2	2	2	2	2			
$\chi_{28}^{(136)}$	-2	-2	-2	2	2	2	2	-2	-2	-2	-2	2	2	2	2	-2	-2	-2	-2	2	2	2	2	2	-2	-2	-2			
$\chi_{28}^{(137)}$	-2	-H	H	-2	2	H	-H	2	-2	-H	H	-2	2	-H	H	-2	2	H	-H	2	-2	-H	H	-2	2	H	-H			
$\chi_{28}^{(138)}$	-2	H	-H	-2	2	-H	H	2	-2	H	-H	-2	2	H	-H	-2	2	-H	H	2	-2	H	-H	-2	2	-H	H			
$\chi_{28}^{(139)}$	2	H	-H	2	-2	-H	H	-2	2	H	-H	2	-2	H	-H	2	-2	-H	H	-2	2	H	-H	2	-2	-H	H			
$\chi_{28}^{(140)}$	2	-H	H	2	-2	H	-H	-2	2	-H	H	2	-2	-H	H	2	-2	H	-H	-2	2	-H	H	2	-2	H	-H			
$\chi_{28}^{(141)}$	-2	-H	H	-2	2	H	-H	2	-2	-H	H	-2	2	H	-H	2	-2	-H	H	-2	2	H	-H	2	-2	-H	H			
$\chi_{28}^{(142)}$	-2	H	-H	-2	2	-H	H	2	-2	H	-H	-2	2	-H	H	2	-2	H	-H	-2	2	-H	H	2	-2	H	-H			
$\chi_{28}^{(143)}$	2	H	-H	2	-2	-H	H	-2	2	H	-H	2	-2	-H	H	-2	2	H	-H	2	-2	-H	H	-2	2	H	-H			
$\chi_{28}^{(144)}$	2	-H	H	2	-2	H	-H	-2	2	-H	H	2	-2	H	-H	-2	2	-H	H	2	-2	H	-H	-2	2	-H	H			
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$\chi_{28}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1				
$\chi_{28}^{(2)}$	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1				
$\chi_{28}^{(3)}$	1	1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1				
$\chi_{28}^{(4)}$	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1			
$\chi_{28}^{(5)}$	-1	-1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1			
$\chi_{28}^{(6)}$	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	1	1	1	1				
$\chi_{28}^{(7)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	1	1	1	1				
$\chi_{28}^{(8)}$	-1	-1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1				
$\chi_{28}^{(9)}$	1	-1	A	-A	-1	1	A	-A	-1	1	A	-A	-1	1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	-A			
$\chi_{28}^{(10)}$	1	-1	-A	A	-1	1	-A	A	-1	1	-A	A	-1	1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	A			
$\chi_{28}^{(11)}$	-1	1	A	-A	-1	1	A	-A	-1	1	A	-A	-1	1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	-A			
$\chi_{28}^{(12)}$	-1	1	-A	A	-1	1	-A	A	-1	1	-A	A	-1	1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	A			
$\chi_{28}^{(13)}$	-1	1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	-A			
$\chi_{28}^{(14)}$	-1	1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	A			
$\chi_{28}^{(15)}$	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	-A			
$\chi_{28}^{(16)}$	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	A			
$\chi_{28}^{(17)}$	-2	-2			
$\chi_{28}^{(18)}$	2	2			
$\chi_{28}^{(19)}$	-2	-2			
$\chi_{28}^{(20)}$	2	2			
$\chi_{28}^{(21)}$	2	2			
$\chi_{28}^{(22)}$	-2	-2			
$\chi_{28}^{(23)}$	2	2			
$\chi_{28}^{(24)}$	-2	-2			
$\chi_{28}^{(25)}$	-2	2			

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$\chi_{28}^{(26)}$	-2	2
$\chi_{28}^{(27)}$	2	-2
$\chi_{28}^{(28)}$	2	-2
$\chi_{28}^{(29)}$	2	-2
$\chi_{28}^{(30)}$	2	-2
$\chi_{28}^{(31)}$	-2	2
$\chi_{28}^{(32)}$	-2	2
$\chi_{28}^{(33)}$	-1	-1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{28}^{(34)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{28}^{(35)}$	-3	-3	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1
$\chi_{28}^{(36)}$	3	3	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1
$\chi_{28}^{(37)}$	-1	-1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1
$\chi_{28}^{(38)}$	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1
$\chi_{28}^{(39)}$	-3	-3	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	-1	-1
$\chi_{28}^{(40)}$	3	3	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	-1	-1
$\chi_{28}^{(41)}$	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1
$\chi_{28}^{(42)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1
$\chi_{28}^{(43)}$	3	3	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1
$\chi_{28}^{(44)}$	-3	-3	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1
$\chi_{28}^{(45)}$	1	1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	-1	-1
$\chi_{28}^{(46)}$	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	-1	-1
$\chi_{28}^{(47)}$	3	3	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1
$\chi_{28}^{(48)}$	-3	-3	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1
$\chi_{28}^{(49)}$	-1	1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A
$\chi_{28}^{(50)}$	-1	1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A
$\chi_{28}^{(51)}$	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A
$\chi_{28}^{(52)}$	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A
$\chi_{28}^{(53)}$	-3	3	-A	A	1	-1	-A	A	1	-1	A	-A	-1	1	A	-A	-1	1	-A	A
$\chi_{28}^{(54)}$	-3	3	A	-A	1	-1	A	-A	1	-1	-A	A	-1	1	-A	A	-1	1	A	-A
$\chi_{28}^{(55)}$	3	-3	-A	A	1	-1	-A	A	1	-1	A	-A	-1	1	A	-A	-1	1	-A	A
$\chi_{28}^{(56)}$	3	-3	A	-A	1	-1	A	-A	1	-1	-A	A	-1	1	-A	A	-1	1	A	-A
$\chi_{28}^{(57)}$	1	-1	A	-A	-1	1	A	-A	-1	1	A	-A	-1	1	-A	A	1	-1	-A	A
$\chi_{28}^{(58)}$	1	-1	-A	A	-1	1	-A	A	-1	1	-A	A	-1	1	A	-A	1	-1	A	-A
$\chi_{28}^{(59)}$	-1	1	A	-A	-1	1	A	-A	-1	1	A	-A	-1	1	-A	A	1	-1	-A	A
$\chi_{28}^{(60)}$	-1	1	-A	A	-1	1	-A	A	-1	1	-A	A	-1	1	A	-A	1	-1	A	-A
$\chi_{28}^{(61)}$	3	-3	A	-A	-1	1	A	-A	-1	1	-A	A	1	-1	A	-A	-1	1	-A	A
$\chi_{28}^{(62)}$	3	-3	-A	A	-1	1	-A	A	-1	1	A	-A	1	-1	-A	A	-1	1	A	-A
$\chi_{28}^{(63)}$	-3	3	A	-A	-1	1	A	-A	-1	1	-A	A	1	-1	A	-A	-1	1	-A	A
$\chi_{28}^{(64)}$	-3	3	-A	A	-1	1	-A	A	-1	1	A	-A	1	-1	-A	A	-1	1	A	-A
$\chi_{28}^{(65)}$	.	.	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
$\chi_{28}^{(66)}$	.	.	2	2	-2	-2	2	2	-2	-2	2	2	-2	-2	2	2	-2	-2	2	2
$\chi_{28}^{(67)}$	.	.	2	2	2	2	2	2	2	2	2	2	2	2	-2	-2	-2	-2	-2	-2
$\chi_{28}^{(68)}$.	.	-2	-2	2	2	-2	-2	2	2	-2	-2	2	2	2	2	-2	-2	2	2
$\chi_{28}^{(69)}$.	.	-H	H	-2	2	-H	H	-2	2	-H	H	-2	2	-H	H	-2	2	-H	H
$\chi_{28}^{(70)}$.	.	H	-H	-2	2	H	-H	-2	2	H	-H	-2	2	H	-H	-2	2	H	-H

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$\chi_{28}^{(71)}$.	.	H	-H	2	-2	H	-H	2	-2	H	-H	2	-2	H	H	-2	2	-H	H	-2	2	-H
$\chi_{28}^{(72)}$.	.	-H	H	2	-2	-H	H	2	-2	-H	H	2	-2	H	-H	-2	2	H	-H	-2	2	H
$\chi_{28}^{(73)}$	-2	-2	-2	-2	-2	-2	2	2	2	2	2	2	2	2	-2
$\chi_{28}^{(74)}$	-4	-4	2	2	2	2	-2	-2	-2	-2	.	.	.	.	.	.	.	.	-2	-2	-2	-2	2
$\chi_{28}^{(75)}$	2	2	-2	-2	-2	-2	2	2	2	2	.	.	.	.	.	.	.	.	2	2	2	2	-2
$\chi_{28}^{(76)}$	4	4	2	2	2	2	-2	-2	-2	-2	.	.	.	.	.	.	.	.	-2	-2	-2	-2	2
$\chi_{28}^{(77)}$	.	.	2	2	2	2	2	2	2	2	-2	-2	-2	-2	-2	-2	-2	-2	2	2	2	2	2
$\chi_{28}^{(78)}$	-2	-2	2	2	-2	-2	-2	-2	2	2	.	.	.	.	.	.	.	.	-2	-2	2	2	2
$\chi_{28}^{(79)}$	-4	-4	-2	-2	2	2	2	2	-2	-2	.	.	.	.	.	.	.	.	2	2	-2	-2	-2
$\chi_{28}^{(80)}$	2	2	2	2	-2	-2	-2	-2	2	2	.	.	.	.	.	.	.	.	-2	-2	2	2	2
$\chi_{28}^{(81)}$	4	4	-2	-2	2	2	2	2	-2	-2	.	.	.	.	.	.	.	.	2	2	-2	-2	-2
$\chi_{28}^{(82)}$	.	.	-2	-2	2	2	-2	-2	2	2	2	2	-2	-2	2	2	-2	-2	-2	-2	2	2	-2
$\chi_{28}^{(83)}$	.	.	-2	-2	-2	-2	-2	-2	-2	-2	2	2	2	2	-2	-2	-2	-2	2	2	2	2	2
$\chi_{28}^{(84)}$	2	2	2	2	2	2	-2	-2	-2	-2	.	.	.	.	.	.	.	.	2	2	2	2	-2
$\chi_{28}^{(85)}$	4	4	-2	-2	-2	-2	2	2	2	2	.	.	.	.	.	.	.	.	-2	-2	-2	-2	2
$\chi_{28}^{(86)}$	-2	-2	2	2	2	2	-2	-2	-2	-2	.	.	.	.	.	.	.	.	2	2	2	2	-2
$\chi_{28}^{(87)}$	-4	-4	-2	-2	-2	-2	2	2	2	2	.	.	.	.	.	.	.	.	-2	-2	-2	-2	2
$\chi_{28}^{(88)}$	.	.	2	2	-2	-2	2	2	-2	-2	-2	-2	2	2	2	2	-2	-2	-2	-2	2	2	-2
$\chi_{28}^{(89)}$	2	2	-2	-2	2	2	2	2	-2	-2	.	.	.	.	.	.	.	.	-2	-2	2	2	2
$\chi_{28}^{(90)}$	4	4	2	2	-2	-2	-2	-2	2	2	.	.	.	.	.	.	.	.	2	2	-2	-2	-2
$\chi_{28}^{(91)}$	-2	-2	-2	-2	2	2	2	2	-2	-2	.	.	.	.	.	.	.	.	-2	-2	2	2	2
$\chi_{28}^{(92)}$	-4	-4	2	2	-2	-2	-2	-2	2	2	.	.	.	.	.	.	.	.	2	2	-2	-2	-2
$\chi_{28}^{(93)}$	-2	2	-H	H	-2	2	H	-H	2	-2	.	.	.	.	.	.	.	.	H	-H	2	-2	-H
$\chi_{28}^{(94)}$	-2	2	H	-H	-2	2	-H	H	2	-2	.	.	.	.	.	.	.	.	-H	H	2	-2	H
$\chi_{28}^{(95)}$	-4	4	H	-H	2	-2	-H	H	-2	2	.	.	.	.	.	.	.	.	-H	H	-2	2	H
$\chi_{28}^{(96)}$	-4	4	-H	H	2	-2	H	-H	-2	2	.	.	.	.	.	.	.	.	H	-H	-2	2	-H
$\chi_{28}^{(97)}$	2	-2	-H	H	-2	2	H	-H	2	-2	.	.	.	.	.	.	.	.	H	-H	2	-2	-H
$\chi_{28}^{(98)}$	2	-2	H	-H	-2	2	-H	H	2	-2	.	.	.	.	.	.	.	.	-H	H	2	-2	H
$\chi_{28}^{(99)}$	4	-4	H	-H	2	-2	-H	H	-2	2	.	.	.	.	.	.	.	.	-H	H	-2	2	H
$\chi_{28}^{(100)}$	4	-4	-H	H	2	-2	H	-H	-2	2	.	.	.	.	.	.	.	.	H	-H	-2	2	-H
$\chi_{28}^{(101)}$	.	.	H	-H	2	-2	H	-H	2	-2	-H	H	-2	2	-H	H	-2	2	H	-H	2	-2	H
$\chi_{28}^{(102)}$	.	.	-H	H	2	-2	-H	H	2	-2	H	-H	-2	2	H	-H	-2	2	-H	H	2	-2	-H
$\chi_{28}^{(103)}$	.	.	-H	H	-2	2	-H	H	-2	2	H	-H	2	-2	-H	H	-2	2	H	-H	2	-2	H
$\chi_{28}^{(104)}$	.	.	H	-H	-2	2	H	-H	-2	2	-H	H	2	-2	H	-H	-2	2	-H	H	2	-2	-H
$\chi_{28}^{(105)}$	2	-2	H	-H	2	-2	-H	H	-2	2	.	.	.	.	.	.	.	.	H	-H	2	-2	-H
$\chi_{28}^{(106)}$	2	-2	-H	H	2	-2	H	-H	-2	2	.	.	.	.	.	.	.	.	-H	H	2	-2	H
$\chi_{28}^{(107)}$	4	-4	-H	H	-2	2	H	-H	2	-2	.	.	.	.	.	.	.	.	-H	H	-2	2	H
$\chi_{28}^{(108)}$	4	-4	H	-H	-2	2	-H	H	2	-2	.	.	.	.	.	.	.	.	H	-H	-2	2	-H
$\chi_{28}^{(109)}$	-2	2	H	-H	2	-2	-H	H	-2	2	.	.	.	.	.	.	.	.	H	-H	2	-2	-H
$\chi_{28}^{(110)}$	-2	2	-H	H	2	-2	H	-H	-2	2	.	.	.	.	.	.	.	.	-H	H	2	-2	H
$\chi_{28}^{(111)}$	-4	4	-H	H	-2	2	H	-H	2	-2	.	.	.	.	.	.	.	.	-H	H	-2	2	H
$\chi_{28}^{(112)}$	-4	4	H	-H	-2	2	-H	H	2	-2	.	.	.	.	.	.	.	.	H	-H	-2	2	-H
$\chi_{28}^{(113)}$	3	3	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1
$\chi_{28}^{(114)}$	-3	-3	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1
$\chi_{28}^{(115)}$	3	3	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	1

[illegible]

	80										90										100												
$\chi_{28}^{(16)}$	-A	1	-1	-1	1	A	-A	-1	1	A	-A	-1	1	A	-A	-1	1	A	-A	-1	1	A	-A	-1	1	A	-A	-1	1	A	-A	-1	1
$\chi_{28}^{(17)}$	.	.	.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{28}^{(18)}$	.	.	.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{28}^{(19)}$	.	.	.	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1
$\chi_{28}^{(20)}$	.	.	.	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1
$\chi_{28}^{(21)}$	.	.	.	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{28}^{(22)}$	.	.	.	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{28}^{(23)}$	.	.	.	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1
$\chi_{28}^{(24)}$	.	.	.	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1
$\chi_{28}^{(25)}$	.	.	.	-1	1	-A	A	-1	1	-A	A	-1	1	-A	A	-1	1	-A	A	-1	1	-A	A	-1	1	-A	A	-1	1	-A	A	-1	1
$\chi_{28}^{(26)}$	.	.	.	-1	1	A	-A	-1	1	A	-A	-1	1	A	-A	-1	1	A	-A	-1	1	A	-A	-1	1	A	-A	-1	1	A	-A	-1	1
$\chi_{28}^{(27)}$	.	.	.	-1	1	-A	A	-1	1	-A	A	-1	1	-A	A	-1	1	-A	A	-1	1	-A	A	-1	1	-A	A	-1	1	-A	A	-1	1
$\chi_{28}^{(28)}$	.	.	.	-1	1	A	-A	-1	1	A	-A	-1	1	A	-A	-1	1	A	-A	-1	1	A	-A	-1	1	A	-A	-1	1	A	-A	-1	1
$\chi_{28}^{(29)}$	.	.	.	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	-1	1	-A	A	-1	1	-A	A	-1	1	-A	A	-1	1	-A	A	-1	1
$\chi_{28}^{(30)}$	.	.	.	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	-1	1	A	-A	-1	1	A	-A	-1	1	A	-A	-1	1	A	-A	-1	1
$\chi_{28}^{(31)}$	.	.	.	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	-1	1	-A	A	-1	1	-A	A	-1	1	-A	A	-1	1	-A	A	-1	1
$\chi_{28}^{(32)}$	.	.	.	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	-1	1	A	-A	-1	1	A	-A	-1	1	A	-A	-1	1	A	-A	-1	1
$\chi_{28}^{(33)}$	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_{28}^{(34)}$	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_{28}^{(35)}$	1	1	1	2	2	2	2	.	.	.	.	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	.	.	.	.	2	2
$\chi_{28}^{(36)}$	1	1	1	2	2	2	2	.	.	.	.	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	.	.	.	.	2	2	
$\chi_{28}^{(37)}$	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1
$\chi_{28}^{(38)}$	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1
$\chi_{28}^{(39)}$	-1	1	1	2	2	-2	-2	.	.	.	.	-2	-2	2	2	-2	-2	2	2	-2	-2	2	2	-2	-2	2	2	.	.	.	.	2	2
$\chi_{28}^{(40)}$	-1	1	1	2	2	-2	-2	.	.	.	.	-2	-2	2	2	-2	-2	2	2	-2	-2	2	2	-2	-2	2	2	.	.	.	.	2	2
$\chi_{28}^{(41)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_{28}^{(42)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_{28}^{(43)}$	1	1	1	-2	-2	-2	-2	.	.	.	.	2	2	2	2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	.	.	.	.	2	2
$\chi_{28}^{(44)}$	1	1	1	-2	-2	-2	-2	.	.	.	.	2	2	2	2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	.	.	.	.	2	2
$\chi_{28}^{(45)}$	-1	1	1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1
$\chi_{28}^{(46)}$	-1	1	1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1
$\chi_{28}^{(47)}$	-1	1	1	-2	-2	2	2	.	.	.	.	2	2	-2	-2	-2	-2	2	2	-2	-2	2	2	-2	-2	2	2	.	.	.	.	2	2
$\chi_{28}^{(48)}$	-1	1	1	-2	-2	2	2	.	.	.	.	2	2	-2	-2	-2	-2	2	2	-2	-2	2	2	-2	-2	2	2	.	.	.	.	2	2
$\chi_{28}^{(49)}$	A	1	-1	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1
$\chi_{28}^{(50)}$	-A	1	-1	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1
$\chi_{28}^{(51)}$	A	1	-1	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1
$\chi_{28}^{(52)}$	-A	1	-1	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1
$\chi_{28}^{(53)}$	A	1	-1	-2	2	H	-H	.	.	.	.	2	-2	-H	H	2	-2	-H	H	.	.	.	.	2	-2	-H	H	.	.	.	.	-2	2
$\chi_{28}^{(54)}$	-A	1	-1	-2	2	-H	H	.	.	.	.	2	-2	H	-H	2	-2	H	-H	.	.	.	.	2	-2	H	-H	.	.	.	.	-2	2
$\chi_{28}^{(55)}$	A	1	-1	-2	2	H	-H	.	.	.	.	2	-2	-H	H	2	-2	-H	H	.	.	.	.	2	-2	-H	H	.	.	.	.	-2	2
$\chi_{28}^{(56)}$	-A	1	-1	-2	2	-H	H	.	.	.	.	2	-2	H	-H	2	-2	H	-H	.	.	.	.	2	-2	H	-H	.	.	.	.	-2	2
$\chi_{28}^{(57)}$	A	1	-1	-1	1	-A	A	-1	1	-A	A	-1	1	-A	A	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1
$\chi_{28}^{(58)}$	-A	1	-1	-1	1	A	-A	-1	1	A	-A	-1	1	A	-A	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1
$\chi_{28}^{(59)}$	A	1	-1	-1	1	-A	A	-1	1	-A	A	-1	1	-A	A	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1
$\chi_{28}^{(60)}$	-A	1	-1	-1	1	A	-A	-1	1	A	-A	-1	1	A	-A	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1

	80										90										100									
$\chi_{28}^{(61)}$	A	1	-1	2	-2	-H	H	.	.	.	.	-2	2	H	-H	2	-2	-H	H	.	.	.	.	-2	2
$\chi_{28}^{(62)}$	-A	1	-1	2	-2	H	-H	.	.	.	.	-2	2	-H	H	2	-2	H	-H	.	.	.	.	-2	2
$\chi_{28}^{(63)}$	A	1	-1	2	-2	-H	H	.	.	.	.	-2	2	H	-H	2	-2	-H	H	.	.	.	.	-2	2
$\chi_{28}^{(64)}$	-A	1	-1	2	-2	H	-H	.	.	.	.	-2	2	-H	H	2	-2	H	-H	.	.	.	.	-2	2
$\chi_{28}^{(65)}$	-2	-2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(66)}$	2	-2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(67)}$	-2	-2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(68)}$	2	-2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(69)}$	H	-2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(70)}$	-H	-2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(71)}$	H	-2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(72)}$	-H	-2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(73)}$	-2	-2	-2	1	1	1	1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	1	1					
$\chi_{28}^{(74)}$	2	2	2	1	1	1	1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	1	1					
$\chi_{28}^{(75)}$	-2	-2	-2	1	1	1	1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	1	1					
$\chi_{28}^{(76)}$	2	2	2	1	1	1	1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	1	1					
$\chi_{28}^{(77)}$	2	2	2	-2	-2	-2	-2	.	.	.	.	2	2	2	2	2	2	2	2	.	.	.	.	-2	-2
$\chi_{28}^{(78)}$	2	-2	-2	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	1	1					
$\chi_{28}^{(79)}$	-2	2	2	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	1	1					
$\chi_{28}^{(80)}$	2	-2	-2	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	1	1					
$\chi_{28}^{(81)}$	-2	2	2	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	1	1					
$\chi_{28}^{(82)}$	-2	2	2	-2	-2	2	2	.	.	.	.	2	2	-2	-2	2	2	-2	-2	.	.	.	.	-2	-2
$\chi_{28}^{(83)}$	2	2	2	2	2	2	2	.	.	.	.	-2	-2	-2	-2	2	2	2	2	.	.	.	.	-2	-2
$\chi_{28}^{(84)}$	-2	-2	-2	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1					
$\chi_{28}^{(85)}$	2	2	2	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1					
$\chi_{28}^{(86)}$	-2	-2	-2	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1					
$\chi_{28}^{(87)}$	2	2	2	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1					
$\chi_{28}^{(88)}$	-2	2	2	2	2	-2	-2	.	.	.	.	-2	-2	2	2	2	2	-2	-2	.	.	.	.	-2	-2
$\chi_{28}^{(89)}$	2	-2	-2	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1					
$\chi_{28}^{(90)}$	-2	2	2	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1					
$\chi_{28}^{(91)}$	2	-2	-2	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1					
$\chi_{28}^{(92)}$	-2	2	2	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1					
$\chi_{28}^{(93)}$	H	-2	2	-1	1	-A	A	1	-1	A	-A	-1	1	-A	A	-1	1	-A	A	1	-1	A	-A	-1	1					
$\chi_{28}^{(94)}$	-H	-2	2	-1	1	A	-A	1	-1	-A	A	-1	1	A	-A	-1	1	A	-A	1	-1	-A	A	-1	1					
$\chi_{28}^{(95)}$	-H	2	-2	-1	1	-A	A	1	-1	A	-A	-1	1	-A	A	-1	1	-A	A	1	-1	A	-A	-1	1					
$\chi_{28}^{(96)}$	H	2	-2	-1	1	A	-A	1	-1	-A	A	-1	1	A	-A	-1	1	A	-A	1	-1	-A	A	-1	1					
$\chi_{28}^{(97)}$	H	-2	2	-1	1	-A	A	1	-1	A	-A	-1	1	-A	A	-1	1	-A	A	1	-1	A	-A	-1	1					
$\chi_{28}^{(98)}$	-H	-2	2	-1	1	A	-A	1	-1	-A	A	-1	1	A	-A	-1	1	A	-A	1	-1	-A	A	-1	1					
$\chi_{28}^{(99)}$	-H	2	-2	-1	1	-A	A	1	-1	A	-A	-1	1	-A	A	-1	1	-A	A	1	-1	A	-A	-1	1					
$\chi_{28}^{(100)}$	H	2	-2	-1	1	A	-A	1	-1	-A	A	-1	1	A	-A	-1	1	A	-A	1	-1	-A	A	-1	1					
$\chi_{28}^{(101)}$	-H	2	-2	2	-2	-H	H	.	.	.	.	-2	2	H	-H	-2	2	H	-H	.	.	.	.	2	-2
$\chi_{28}^{(102)}$	H	2	-2	2	-2	H	-H	.	.	.	.	-2	2	-H	H	-2	2	-H	H	.	.	.	.	2	-2
$\chi_{28}^{(103)}$	-H	2	-2	-2	2	H	-H	.	.	.	.	2	-2	-H	H	-2	2	H	-H	.	.	.	.	2	-2
$\chi_{28}^{(104)}$	H	2	-2	-2	2	-H	H	.	.	.	.	2	-2	H	-H	-2	2	-H	H	.	.	.	.	2	-2
$\chi_{28}^{(105)}$	H	-2	2	1	-1	A	-A	-1	1	-A	A	1	-1	A	-A	-1	1	-A	A	1	-1	A	-A	-1	1					

	80										90										100										
$\chi_{28}^{(106)}$	-H	-2	2	1	-1	-A	A	-1	1	A	-A	1	-1	-A	A	-1	1	A	-A	1	-1	-A	A	-1	1						
$\chi_{28}^{(107)}$	-H	2	-2	1	-1	A	-A	-1	1	-A	A	1	-1	A	-A	-1	1	-A	A	1	-1	A	-A	-1	1						
$\chi_{28}^{(108)}$	H	2	-2	1	-1	-A	A	-1	1	A	-A	1	-1	-A	A	-1	1	A	-A	1	-1	-A	A	-1	1						
$\chi_{28}^{(109)}$	H	-2	2	1	-1	A	-A	-1	1	-A	A	1	-1	A	-A	-1	1	-A	A	1	-1	A	-A	-1	1						
$\chi_{28}^{(110)}$	-H	-2	2	1	-1	-A	A	-1	1	A	-A	1	-1	-A	A	-1	1	A	-A	1	-1	-A	A	-1	1						
$\chi_{28}^{(111)}$	-H	2	-2	1	-1	A	-A	-1	1	-A	A	1	-1	A	-A	-1	1	-A	A	1	-1	A	-A	-1	1						
$\chi_{28}^{(112)}$	H	2	-2	1	-1	-A	A	-1	1	A	-A	1	-1	-A	A	-1	1	A	-A	1	-1	-A	A	-1	1						
$\chi_{28}^{(113)}$	-1	-1	-1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(114)}$	-1	-1	-1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(115)}$	1	-1	-1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(116)}$	1	-1	-1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(117)}$	-1	-1	-1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(118)}$	-1	-1	-1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(119)}$	1	-1	-1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(120)}$	1	-1	-1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(121)}$	-A	-1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(122)}$	A	-1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(123)}$	-A	-1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(124)}$	A	-1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(125)}$	-A	-1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(126)}$	A	-1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(127)}$	-A	-1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(128)}$	A	-1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(129)}$	.	.	.	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	-1	-1						
$\chi_{28}^{(130)}$	.	.	.	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	-1	-1						
$\chi_{28}^{(131)}$	.	.	.	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	-1	-1						
$\chi_{28}^{(132)}$	.	.	.	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	-1	-1						
$\chi_{28}^{(133)}$	.	.	.	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1						
$\chi_{28}^{(134)}$	.	.	.	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1						
$\chi_{28}^{(135)}$	.	.	.	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1						
$\chi_{28}^{(136)}$	.	.	.	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1						
$\chi_{28}^{(137)}$	.	.	.	1	-1	A	-A	-1	1	-A	A	1	-1	A	-A	1	-1	A	-A	-1	1	-A	A	1	-1						
$\chi_{28}^{(138)}$	.	.	.	1	-1	-A	A	-1	1	A	-A	1	-1	-A	A	1	-1	-A	A	-1	1	A	-A	1	-1						
$\chi_{28}^{(139)}$	.	.	.	1	-1	A	-A	-1	1	-A	A	1	-1	A	-A	1	-1	A	-A	-1	1	-A	A	1	-1						
$\chi_{28}^{(140)}$	.	.	.	1	-1	-A	A	-1	1	A	-A	1	-1	-A	A	1	-1	-A	A	-1	1	A	-A	1	-1						
$\chi_{28}^{(141)}$	.	.	.	-1	1	-A	A	1	-1	A	-A	-1	1	-A	A	1	-1	A	-A	-1	1	-A	A	1	-1						
$\chi_{28}^{(142)}$.	.	.	-1	1	A	-A	1	-1	-A	A	-1	1	A	-A	1	-1	-A	A	-1	1	A	-A	1	-1						
$\chi_{28}^{(143)}$.	.	.	-1	1	-A	A	1	-1	A	-A	-1	1	-A	A	1	-1	A	-A	-1	1	-A	A	1	-1						
$\chi_{28}^{(144)}$.	.	.	-1	1	A	-A	1	-1	-A	A	-1	1	A	-A	1	-1	-A	A	-1	1	A	-A	1	-1						

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$\chi_{28}^{(1)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
$\chi_{28}^{(2)}$	-1	-1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	1	1
$\chi_{28}^{(3)}$	-1	-1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	-1	-1
$\chi_{28}^{(4)}$	-1	-1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1
$\chi_{28}^{(5)}$	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	-1	-1
$\chi_{28}^{(6)}$	1	1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	1	1
$\chi_{28}^{(7)}$	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	1	1	1
$\chi_{28}^{(8)}$	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1
$\chi_{28}^{(9)}$	-A	A	-A	A	1	-1	-A	A	1	-1	A	-A	-1	1	A	-A	-1	1	-A	A
$\chi_{28}^{(10)}$	A	-A	A	-A	1	-1	A	-A	1	-1	-A	A	-1	1	-A	A	-1	1	A	-A
$\chi_{28}^{(11)}$	-A	A	A	-A	-1	1	A	-A	-1	1	-A	A	1	-1	-A	A	1	-1	-A	A
$\chi_{28}^{(12)}$	A	-A	-A	A	-1	1	-A	A	-1	1	A	-A	1	-1	A	-A	1	-1	A	-A
$\chi_{28}^{(13)}$	-A	A	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A
$\chi_{28}^{(14)}$	A	-A	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A
$\chi_{28}^{(15)}$	-A	A	A	-A	-1	1	A	-A	-1	1	A	-A	-1	1	A	-A	-1	1	-A	A
$\chi_{28}^{(16)}$	A	-A	-A	A	-1	1	-A	A	-1	1	-A	A	-1	1	-A	A	-1	1	A	-A
$\chi_{28}^{(17)}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-1	-1
$\chi_{28}^{(18)}$	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_{28}^{(19)}$	-1	-1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	1	1
$\chi_{28}^{(20)}$	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1
$\chi_{28}^{(21)}$	1	1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_{28}^{(22)}$	1	1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	-1	-1
$\chi_{28}^{(23)}$	-1	-1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	1	1
$\chi_{28}^{(24)}$	-1	-1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	1	1
$\chi_{28}^{(25)}$	-A	A	A	-A	-1	1	A	-A	-1	1	A	-A	-1	1	A	-A	-1	1	A	-A
$\chi_{28}^{(26)}$	A	-A	-A	A	-1	1	-A	A	-1	1	-A	A	-1	1	-A	A	-1	1	-A	A
$\chi_{28}^{(27)}$	-A	A	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	A	-A
$\chi_{28}^{(28)}$	A	-A	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	-A	A
$\chi_{28}^{(29)}$	-A	A	A	-A	-1	1	A	-A	-1	1	-A	A	1	-1	-A	A	1	-1	A	-A
$\chi_{28}^{(30)}$	A	-A	-A	A	-1	1	-A	A	-1	1	A	-A	1	-1	A	-A	1	-1	-A	A
$\chi_{28}^{(31)}$	-A	A	-A	A	1	-1	-A	A	1	-1	A	-A	-1	1	A	-A	-1	1	A	-A
$\chi_{28}^{(32)}$	A	-A	A	-A	1	-1	A	-A	1	-1	-A	A	-1	1	-A	A	-1	1	-A	A
$\chi_{28}^{(33)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	.	.
$\chi_{28}^{(34)}$	-1	-1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	.	.
$\chi_{28}^{(35)}$	2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(36)}$	2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(37)}$	1	1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	.	.
$\chi_{28}^{(38)}$	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	.	.
$\chi_{28}^{(39)}$	-2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(40)}$	-2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(41)}$	-1	-1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	.	.
$\chi_{28}^{(42)}$	-1	-1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	.	.
$\chi_{28}^{(43)}$	2	2
$\chi_{28}^{(44)}$	2	2
$\chi_{28}^{(45)}$	1	1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	.	.

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$\chi_{28}^{(46)}$	1	1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1			
$\chi_{28}^{(47)}$	-2	-2			
$\chi_{28}^{(48)}$	-2	-2			
$\chi_{28}^{(49)}$	A	-A	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1			
$\chi_{28}^{(50)}$	-A	A	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1			
$\chi_{28}^{(51)}$	A	-A	A	-A	-1	1	A	-A	-1	1	A	-A	-1	1	A	-A	-1	1	.	.	.	.	.
$\chi_{28}^{(52)}$	-A	A	-A	A	-1	1	-A	A	-1	1	-A	A	-1	1	-A	A	-1	1	.	.	.	.	.
$\chi_{28}^{(53)}$	H	-H	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(54)}$	-H	H	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(55)}$	H	-H	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(56)}$	-H	H	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(57)}$	A	-A	-A	A	1	-1	-A	A	1	-1	A	-A	-1	1	A	-A	-1	1	.	.	.	.	.
$\chi_{28}^{(58)}$	-A	A	A	-A	1	-1	A	-A	1	-1	-A	A	-1	1	-A	A	-1	1	.	.	.	.	.
$\chi_{28}^{(59)}$	A	-A	A	-A	-1	1	A	-A	-1	1	-A	A	1	-1	-A	A	1	-1	.	.	.	.	.
$\chi_{28}^{(60)}$	-A	A	-A	A	-1	1	-A	A	-1	1	A	-A	1	-1	A	-A	1	-1	.	.	.	.	.
$\chi_{28}^{(61)}$	H	-H	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(62)}$	-H	H	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(63)}$	H	-H	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(64)}$	-H	H	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(65)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1	1	1	1
$\chi_{28}^{(66)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	-1	1	1	-1
$\chi_{28}^{(67)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1	1	1	-1
$\chi_{28}^{(68)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-1	-1	1	1	1
$\chi_{28}^{(69)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-A	A	1	-1	-A
$\chi_{28}^{(70)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	A	-A	1	-1	A
$\chi_{28}^{(71)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	-A	A	1	-1	A
$\chi_{28}^{(72)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	A	-A	1	-1	-A
$\chi_{28}^{(73)}$	1	1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	.	.	.	.	.
$\chi_{28}^{(74)}$	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	.	.	.	.	.
$\chi_{28}^{(75)}$	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	.	.	.	.	.
$\chi_{28}^{(76)}$	1	1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	.	.	.	.	.
$\chi_{28}^{(77)}$	-2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(78)}$	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	.	.	.	.	.
$\chi_{28}^{(79)}$	-1	-1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	.	.	.	.	.
$\chi_{28}^{(80)}$	-1	-1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	.	.	.	.	.
$\chi_{28}^{(81)}$	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	.	.	.	.	.
$\chi_{28}^{(82)}$	2	2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(83)}$	-2	-2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(84)}$	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	.	.	.	.	.
$\chi_{28}^{(85)}$	1	1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	.	.	.	.	.
$\chi_{28}^{(86)}$	1	1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	-1	-1	-1	-1	.	.	.	.	.
$\chi_{28}^{(87)}$	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1			
$\chi_{28}^{(88)}$	2	2			
$\chi_{28}^{(89)}$	-1	-1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1			
$\chi_{28}^{(90)}$	-1	-1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1			

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$\chi_{28}^{(91)}$	-1	-1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1
$\chi_{28}^{(92)}$	-1	-1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1
$\chi_{28}^{(93)}$	-A	A	A	-A	-1	1	-A	A	1	-1	A	-A	-1	1	-A	A	1	-1
$\chi_{28}^{(94)}$	A	-A	-A	A	-1	1	A	-A	1	-1	-A	A	-1	1	A	-A	1	-1	.	.	.	.	.
$\chi_{28}^{(95)}$	-A	A	-A	A	1	-1	A	-A	-1	1	-A	A	1	-1	A	-A	-1	1	.	.	.	.	.
$\chi_{28}^{(96)}$	A	-A	A	-A	1	-1	-A	A	-1	1	A	-A	1	-1	-A	A	-1	1	.	.	.	.	.
$\chi_{28}^{(97)}$	-A	A	-A	A	1	-1	A	-A	-1	1	-A	A	1	-1	A	-A	-1	1	.	.	.	.	.
$\chi_{28}^{(98)}$	A	-A	A	-A	1	-1	-A	A	-1	1	A	-A	1	-1	-A	A	-1	1	.	.	.	.	.
$\chi_{28}^{(99)}$	-A	A	A	-A	-1	1	-A	A	1	-1	A	-A	-1	1	-A	A	1	-1	.	.	.	.	.
$\chi_{28}^{(100)}$	A	-A	-A	A	-1	1	A	-A	1	-1	-A	A	-1	1	A	-A	1	-1	.	.	.	.	.
$\chi_{28}^{(101)}$	-H	H	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(102)}$	H	-H	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(103)}$	-H	H	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(104)}$	H	-H	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(105)}$	-A	A	A	-A	-1	1	-A	A	1	-1	-A	A	1	-1	A	-A	-1	1	.	.	.	.	.
$\chi_{28}^{(106)}$	A	-A	-A	A	-1	1	A	-A	1	-1	A	-A	1	-1	-A	A	-1	1	.	.	.	.	.
$\chi_{28}^{(107)}$	-A	A	-A	A	1	-1	A	-A	-1	1	A	-A	-1	1	-A	A	1	-1	.	.	.	.	.
$\chi_{28}^{(108)}$	A	-A	A	-A	1	-1	-A	A	-1	1	-A	A	-1	1	A	-A	1	-1	.	.	.	.	.
$\chi_{28}^{(109)}$	-A	A	-A	A	1	-1	A	-A	-1	1	A	-A	-1	1	-A	A	1	-1	.	.	.	.	.
$\chi_{28}^{(110)}$	A	-A	A	-A	1	-1	-A	A	-1	1	-A	A	-1	1	A	-A	1	-1	.	.	.	.	.
$\chi_{28}^{(111)}$	-A	A	A	-A	-1	1	-A	A	1	-1	-A	A	1	-1	A	-A	-1	1	.	.	.	.	.
$\chi_{28}^{(112)}$	A	-A	-A	A	-1	1	A	-A	1	-1	A	-A	1	-1	-A	A	-1	1	.	.	.	.	.
$\chi_{28}^{(113)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(114)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(115)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(116)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(117)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(118)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(119)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(120)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(121)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(122)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(123)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(124)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(125)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(126)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(127)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(128)}$	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(129)}$	-1	-1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	.	.	.	.	.
$\chi_{28}^{(130)}$	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	.	.	.	.	.
$\chi_{28}^{(131)}$	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	.	.	.	.	.
$\chi_{28}^{(132)}$	1	1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	.	.	.	.	.
$\chi_{28}^{(133)}$	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1	-1	-1	-1	-1
$\chi_{28}^{(134)}$	-1	-1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1
$\chi_{28}^{(135)}$	1	1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1

[illegible]

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$\chi_{28}^{(36)}$.	.	.	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1
$\chi_{28}^{(37)}$.	.	.	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1
$\chi_{28}^{(38)}$.	.	.	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1	-1	-1	1	1
$\chi_{28}^{(39)}$.	.	.	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1
$\chi_{28}^{(40)}$.	.	.	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1
$\chi_{28}^{(41)}$.	.	.	1	1	1	1	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1
$\chi_{28}^{(42)}$.	.	.	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1	1	1	1	1
$\chi_{28}^{(43)}$.	.	.	-1	-1	-1	-1	1	1	1	1	1	1	1	1	-1	-1	-1	-1
$\chi_{28}^{(44)}$.	.	.	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	-1	1	1	1	1
$\chi_{28}^{(45)}$.	.	.	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1
$\chi_{28}^{(46)}$.	.	.	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1
$\chi_{28}^{(47)}$.	.	.	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	-1	-1	1	1
$\chi_{28}^{(48)}$.	.	.	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	1	1	-1	-1
$\chi_{28}^{(49)}$.	.	.	-1	1	-A	A	-1	1	-A	A	-1	1	-A	A	-1	1	-A	A
$\chi_{28}^{(50)}$.	.	.	-1	1	A	-A	-1	1	A	-A	-1	1	A	-A	-1	1	A	-A
$\chi_{28}^{(51)}$.	.	.	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A	1	-1	A	-A
$\chi_{28}^{(52)}$.	.	.	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A	1	-1	-A	A
$\chi_{28}^{(53)}$.	.	.	1	-1	A	-A	-1	1	-A	A	1	-1	A	-A	-1	1	-A	A
$\chi_{28}^{(54)}$.	.	.	1	-1	-A	A	-1	1	A	-A	1	-1	-A	A	-1	1	A	-A
$\chi_{28}^{(55)}$.	.	.	-1	1	-A	A	1	-1	A	-A	-1	1	-A	A	1	-1	A	-A
$\chi_{28}^{(56)}$.	.	.	-1	1	A	-A	1	-1	-A	A	-1	1	A	-A	1	-1	-A	A
$\chi_{28}^{(57)}$.	.	.	-1	1	-A	A	-1	1	-A	A	1	-1	A	-A	1	-1	A	-A
$\chi_{28}^{(58)}$.	.	.	-1	1	A	-A	-1	1	A	-A	1	-1	-A	A	1	-1	-A	A
$\chi_{28}^{(59)}$.	.	.	1	-1	A	-A	1	-1	A	-A	-1	1	-A	A	-1	1	-A	A
$\chi_{28}^{(60)}$.	.	.	1	-1	-A	A	1	-1	-A	A	-1	1	A	-A	-1	1	A	-A
$\chi_{28}^{(61)}$.	.	.	1	-1	A	-A	-1	1	-A	A	-1	1	-A	A	1	-1	A	-A
$\chi_{28}^{(62)}$.	.	.	1	-1	-A	A	-1	1	A	-A	-1	1	A	-A	1	-1	-A	A
$\chi_{28}^{(63)}$.	.	.	-1	1	-A	A	1	-1	A	-A	1	-1	A	-A	-1	1	-A	A
$\chi_{28}^{(64)}$.	.	.	-1	1	A	-A	1	-1	-A	A	1	-1	-A	A	-1	1	A	-A
$\chi_{28}^{(65)}$	1	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(66)}$	-1	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(67)}$	-1	-1	-1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(68)}$	1	-1	-1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(69)}$	A	1	-1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
$\chi_{28}^{(70)}$	-A	1	-1
$\chi_{28}^{(71)}$	-A	-1	1
$\chi_{28}^{(72)}$	A	-1	1
$\chi_{28}^{(73)}$
$\chi_{28}^{(74)}$
$\chi_{28}^{(75)}$
$\chi_{28}^{(76)}$
$\chi_{28}^{(77)}$
$\chi_{28}^{(78)}$
$\chi_{28}^{(79)}$
$\chi_{28}^{(80)}$

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$\chi_{28}^{(81)}$
$\chi_{28}^{(82)}$
$\chi_{28}^{(83)}$
$\chi_{28}^{(84)}$
$\chi_{28}^{(85)}$
$\chi_{28}^{(86)}$
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$\chi_{28}^{(106)}$
$\chi_{28}^{(107)}$
$\chi_{28}^{(108)}$
$\chi_{28}^{(109)}$
$\chi_{28}^{(110)}$
$\chi_{28}^{(111)}$
$\chi_{28}^{(112)}$
$\chi_{28}^{(113)}$.	.	.	-1	-1	-1	-1	1	1	1	1	-1	-1	-1	-1	1
$\chi_{28}^{(114)}$.	.	.	1	1	1	1	-1	-1	-1	-1	1	1	1	-1	-1
$\chi_{28}^{(115)}$.	.	.	-1	-1	1	1	1	1	-1	-1	-1	-1	1	1	-1
$\chi_{28}^{(116)}$.	.	.	1	1	-1	-1	-1	-1	1	1	1	1	-1	-1	1
$\chi_{28}^{(117)}$.	.	.	-1	-1	-1	-1	1	1	1	1	1	1	1	-1	-1
$\chi_{28}^{(118)}$.	.	.	1	1	1	1	-1	-1	-1	-1	-1	-1	-1	1	1
$\chi_{28}^{(119)}$.	.	.	-1	-1	1	1	1	1	-1	-1	1	1	-1	-1	1
$\chi_{28}^{(120)}$.	.	.	1	1	-1	-1	-1	-1	1	1	-1	-1	1	1	-1
$\chi_{28}^{(121)}$.	.	.	1	-1	A	-A	-1	1	-A	A	1	-1	A	-A	A
$\chi_{28}^{(122)}$.	.	.	1	-1	-A	A	-1	1	A	-A	1	-1	-A	A	-A
$\chi_{28}^{(123)}$.	.	.	-1	1	-A	A	1	-1	A	-A	-1	1	-A	A	-A
$\chi_{28}^{(124)}$.	.	.	-1	1	A	-A	1	-1	-A	A	-1	1	A	-A	A
$\chi_{28}^{(125)}$.	.	.	1	-1	A	-A	-1	1	-A	A	-1	1	-A	A	-A

	130										140								
$\chi_{28}^{(126)}$.	.	.	1	-1	-A	A	-1	1	A	-A	-1	1	A	-A	1	-1	-A	A
$\chi_{28}^{(127)}$.	.	.	-1	1	-A	A	1	-1	A	-A	1	-1	A	-A	-1	1	-A	A
$\chi_{28}^{(128)}$.	.	.	-1	1	A	-A	1	-1	-A	A	1	-1	-A	A	-1	1	A	-A
$\chi_{28}^{(129)}$
$\chi_{28}^{(130)}$
$\chi_{28}^{(131)}$
$\chi_{28}^{(132)}$
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$\chi_{28}^{(134)}$
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$\chi_{28}^{(140)}$
$\chi_{28}^{(141)}$
$\chi_{28}^{(142)}$
$\chi_{28}^{(143)}$
$\chi_{28}^{(144)}$

where $A = -E(4) = -ER(-1) = -i$, $B = -4^*E(4) = -4^*ER(-1) = -4i$, $C = -5^*E(4) = -5^*ER(-1) = -5i$, $D = -6^*E(4) = -6^*ER(-1) = -6i$, $E = -10^*E(4) = -10^*ER(-1) = -10i$, $F = -15^*E(4) = -15^*ER(-1) = -15i$, $G = -20^*E(4) = -20^*ER(-1) = -20i$, $H = 2^*E(4) = 2^*ER(-1) = 2i$, $I = -3^*E(4) = -3^*ER(-1) = -3i$, $J = 9^*E(4) = 9^*ER(-1) = 9i$.

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